VIOLENCE, SEXUAL AGGRESSION, AND PSYCHOPATHY-RELATED PERSONALITY TRAITS IN COLLEGE STUDENTS' DATING RELATIONSHIPS

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ABSTRACT

The first purpose of the current study was to assess the relationship between sexual aggression and violence to determine whether women's higher reported rate of use of violence against a dating partner is related to defending against unwanted sexual advances. The second purpose was to determine whether psychopathy-related personality traits would differentiate subjects who reported using aggression from those subjects who did not. Subjects were 274 students from the University of Windsor with a replication sample of 174 students from the University of Saskatchewan. All subjects completed the Revised Conflict Tactics Scale (Josephson & Check, 1990), a sexual aggression scale (Stets & Pirog-Good, 1989), the Socialization scale (So; Gough, 1975), Eysenck's (1985) I-7 (impulsivity, venturesomeness, and empathy) and a similar measure by Schalling (1978), and the Social Desirability Scale (Crowne & Marlowe, 1960). Results indicated that, while males associate physical and sexual aggression, females do not. The Socialization scale was the only personality measure which predicted the use of physical aggression by females and the use of sexual aggression by males. Sociocultural attitudes regarding gender expectations are considered while interpreting the sex differences. Alternate research methods are suggested for further exploration of questions raised by the current study.

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1.0 INTRODUCTION

From a current perspective, it may seem surprising that the initial investigation into violence in dating relationships was published as recently as 1981. This premier study by Makepeace (1981) reported that 21.2% of the college students surveyed had experienced violence in their dating relationships. This high incidence has been replicated in similar studies on campuses throughout the United States. Within this literature, there are sex differences in the reported use and receipt of violence tactics which are not well explained. Generally, women tend to report using violence tactics against their partners more often than do men, while men tend to report receiving their partners' violence tactics more often than do women. It is the current author's hypothesis that the presence of sexual aggression in dating relationships may help account for the differential reporting; one purpose of the current study was to investigate the relationship between reported sexual aggression and reported physical aggression.

An additional area of dating violence that has not been explored in depth is the contribution made by the personalities of the participants in violent dating relationships. Forensic research suggests that one possibility is that those using aggressive tactics against their partners tend to manifest traits associated with the personality construct of psychopathy. The second purpose of the current study was to examine the relationship between psychopathy-related

personality traits and the reported use of physical and sexual aggression in dating relationships.

1.1 Violence in Dating Relationships: An Overview

The reported incidence or prevalence of dating violence has generally ranged from 23% to 35% of college student subjects (Bernard & Bernard, 1983; Bernard, Bernard, & Bernard, 1985; Brodbelt, 1983; Cate, Henton, Koval, Christopher, & Lloyd, 1982; Lane & Gwartney-Gibbs, 1985; Mason & Blankenship, 1987; Matthews, 1984; Sack, Keller, & Howard, 1982). However, across all studies, the incidence ranges from a low of 16.7% (Makepeace, 1986, 1987) to a high over 45% (Pedersen & Thomas, in press: 45.8%; Sigelman, Berry & Wiles, 1984: 53%).

The low rate reported by Makepeace may be attributable to self-selection factors associated with mail-in questionnaires. The higher rate found by Sigelman and her colleagues may be attributed to the inclusion of individuals answering on the basis of cohabiting relationships, since it has been established that cohabiting couples generally report higher levels of violence than either dating or married couples (Stets & Straus, 1989). Sigelman et al. (1984) also suggest that their higher rate may be due to a "subculture of violence". That is, their sample was drawn from a population (Appalachia) for whom the use of physical aggression is generally not considered inappropriate when resolving conflict. In the one Canadian sample in the literature (collected at the University of Windsor), 45.8% of the students reported experiencing at least one violent incident in their dating relationships. This relatively high reported rate of violence may be

due to the proximity of Windsor to Detroit, a large U.S. city which has high rates of violence. However, the rate reported in the Canadian sample does indicate that Canadian students form an appropriate survey group for the study of correlates of dating violence.

In the studies mentioned above, violence in dating relationships has been assessed through the use of Straus' (1979) Conflict Tactics Scales (CTS), which includes a violence scale. This scale (see Table 1) contains eight items ranging from throwing things, through biting, to using a knife or gun. Lane and Gwartney-Gibbs (1985) noted that the frequency of violent acts reported in dating relationships is inversely related to the likelihood of their causing injury (Cate et al., 1982; Lane & Gwartney-Gibbs, 1985; Laner & Thompson, 1982). As Table 1 indicates, their observation is also borne out in more recent studies. That is, in the Pedersen & Thomas (in press) study, 4 - 16% of males reported using moderate violence tactics while only 2 - 8% reported using severe violence tactics, and in the Arias, Samios, and O'Leary (1987) study, 10 - 28% of males reported using moderate tactics and only 0 - 8% reported using severe tactics. While "less injurious" acts include throwing things, pushing or grabbing, and slapping, more severe tactics include kicking, biting, hitting with a closed fist, hitting with something, beating up, and using a knife or gun.

Straus and Gelles (1986) suggested that the CTS Violence scale may be divided by placing its first three items into a "minor" violence category, and its last five items into a "severe" violence category. This division is justified on the grounds that it "parallels the legal

Table 1

Percentages of Men and Women Reporting Expression and Receipt of Specific CTS Violence Tactics in Dating Relationships

CTS Violence Tactic	Pedersen & Thomas sample (in press)				Arias et al. sample (1987)			
	Males (n = 50)		Females (n = 116)		Males (n = 95)		Females (n = 175)	
	Exp'd	Rec'd	Exp'd	Rec'd	Exp'd	Rec'd	Exp'd	Rec'd
Moderate Violence Tactics								
1. Threw something	4	18	15	8	13	23	11	5
2. Pushed, grabbed, or shoved	16	12	29	20	28	40	29	26
3. Slapped	10	12	22	6	10	43	15	5
Severe Violence Tactics								
4. Kicked, bit, or hit with fist	6	10	13	5	0	25	10	2
5. Hit (or tried) with something	8	10	10	3	8	13	3	2
6. Beat up	4	4	3	2	3	0	0	1
7. Threatened with knife/gun	2	4	0	1	0	3	0	1
8. Used knife/gun	2	4	0	0	0	0	0	1

Note Exp'd = Expressed physical aggression; Rec'd = Received physical aggression.

distinction between a 'simple assault' and an 'aggravated assault'" (Straus & Gelles, 1986, p. 476), which is more likely to cause serious injury. The more frequent use of less severe tactics suggests that violence may be acceptable as a means of conflict resolution, but only to a certain point. When the injuries can be hidden from public view, the violence within a person's dating relationship can also be hidden and the emotional impact may be minimized, misinterpreted, and/or denied by both partners.

Roark (1987), in her review of the literature on violence on college campuses, found it useful to conceptualize violence in dating relationships as the campus equivalent of domestic violence, as opposed to other forms of campus violence involving non-intimates. She noted that a major difference between domestic and dating violence is that violence within dating relationships is still largely hidden or denied, allowing both victims and offenders to continue their behaviours. Roark speculated that victims of dating violence may suffer in silence and blame themselves for causing or contributing to the violence. Some of the consequences of this silence and self-blame are that the abusers remain hidden, avoid community recriminations, and tend to rationalize their behaviours.

Several investigators have found that dating relationships tend to continue regardless of violent interactions (Billingham, 1987; Billingham & Sack, 1987; Brodbelt, 1983; Cate et al., 1982; Matthews, 1984; Roscoe & Callahan, 1985; Sigelman, et al., 1984). Billingham (1987) observed that some subjects have reported an improvement in their

dating relationships after a violent incident. More specifically, Matthews (1984) found that, of college students who reported experiencing violence in their dating relationships, 43% felt that the relationship had improved following the violent incident, and 28% interpreted the violence as an act of love.

Roscoe and Benaske (1985) collected data from abused wives in eight shelters in Michigan. They found the reports from abused wives to be similar to those of (previously studied) college females who were involved in violent dating relationships, with regard to perceived causes (e.g., violence in family of origin, jealousy, alcohol consumption), consequences (e.g., continuing the relationship), and forms (e.g., the less injurious forms such as pushing, shoving, slapping being reported more often) of experienced violence. Of the women surveyed, 49% had experienced violence in their dating relationships, while only 31% had experienced violence in their family-of-origin. Further, 30% of the women surveyed were married to someone who had abused them during courtship. Violence in dating relationships does not appear to be something that can be disregarded as youthful folly.

1.2 Measuring Violence in Dating Relationships

To enhance the research on intrafamily conflict and violence, Straus (1979) sought to clarify the concepts used, and to develop measures of those concepts. Straus stated that conflict between intimates is inevitable, as "members of a social group, no matter how small and intimate, are each seeking to live out their lives in accordance with personal agenda which inevitably differ" (p. 76).

Straus (1979) defined conflict tactics as "overt actions used by persons in response to a conflict of interest" (p. 76). He conceptualized three basic categories of conflict tactics, and designed the CTS to include items from each category. The Reasoning scale consists of items involving "the use of rational discussion, argument and reasoning - an intellectual approach to the dispute" (p. 77), the Verbal Aggression scale consists of items involving "the use of verbal and nonverbal acts which symbolically hurt the other, or the use of threats to hurt the other" (p. 77), and the Violence scale consists of items pertaining to "the use of physical force against another person" (p. 77). Factor analytic studies using data from married couples support distinguishing these three scales (Barling, O'Leary, Jouriles, Vivian, & MacEwen, 1987; Straus, 1979, 1990). Each of the scales "start with items which most respondents positively value, and then gradually increase in coerciveness and social disapproval" (Straus, 1979, p. 79).

The CTS was first administered by way of a telephone interview to a national sample of married couples. Straus attributed the high completion rate (65%) obtained from this sample (in spite of the sensitive nature of the questions) to the acceptability of the CTS. That is, by the time the respondents were answering specific questions about their own and their spouse's use of violence tactics, "they had already indicated their use of more acceptable tactics to resolve the conflict, and, though not explicitly stated, may have felt that the use of violence was acceptable in those situations where nothing else had worked to resolve the conflict" (Straus, 1979, p.79).

Since its publication in 1979, the CTS has become the most widely used instrument for measuring violence in the family. Although the original form of the CTS was designed to be administered in a telephone interview, most researchers have revised it for use as a paper-and-pencil self-report measure. Besides this change in response format, these revisions typically varied in minor ways from the original CTS (e.g., "hit (or tried) with something" became "struck with object" (Makepeace, 1981), "hit with hard object" (Laner & Thompson, 1982), and "hit or tried to hit" (Cate et al., 1982)). Such revised forms have been used extensively to measure violence in dating relationships (e.g., Billingham, 1987; Billingham & Sack, 1987; Laner & Thompson, 1982; Sack, Keller, & Howard, 1982), with many researchers using only the Violence scale (e.g., Arias, Samios, & O'Leary, 1987; Bernard & Bernard, 1983; Lane & Gwartney-Gibbs, 1985; Roscoe & Benaske, 1985; Rouse, 1988). There are no studies in the literature reporting the use of any other instrument to assess the incidence, prevalence, or correlates of violence in dating relationships.

The CTS was developed primarily to assess violence, especially wife-battering, and the Violence scale was the focus of its development. Although the point has been made that the CTS has limited usefulness to measure the full range of tactics used by couples to resolve conflict (Josephson & Check, 1990; Straus, 1990), the focus of the current study is also on violence, and examination of other methods of conflict resolution are beyond the scope of this paper. However, a revised version developed by Josephson and Check (1990) to provide a broader

range of tactics is lengthier (43 items) than the original CTS (19 items), the violence scale is unchanged and the added length of the total questionnaire may increase the likelihood of subjects' reporting their experience of violence in their dating relationships, after demonstrating that they have tried so many other means to resolve the conflict (Straus, 1979).

The Violence scale has apparently good "face" validity, as the items all describe physical acts which may be coercive. As evidence of construct validity, Straus (1979) noted that the reported occurrence of physical aggression as measured by the CTS was consistent with previous in-depth interview studies (e.g., Gelles, 1974, cited in Straus, 1979). More recently, Straus (1990) noted that other methods have been used to assess spousal violence in the United States, including the National Crime Survey (Gaguin, 1977, cited in Straus, 1990) and the Index of Spouse Abuse (Hudson & Macintosh, 1981, cited in Straus, 1990). However, the National Crime Survey places its questions in the context of crime, which may lower the reported rate, as participants may be experiencing violence but have not labelled it a "crime". The Index of Spouse Abuse confounds physical aggression with other measures (i.e., "my partner becomes surly and angry if I tell him he is drinking too much"). The behaviour may be unpleasant and even abusive, but is not necessarily violent.

Straus (1990) discussed several criticisms of the CTS Violence scale. These include that it is restricted to conflict-related violence (thereby excluding reports of simple malevolence), that threats are

counted as violence, and that self-reports covering a one-year period are inaccurate (due to reliance on memory, with the more severe instances being more salient than those of lesser severity). Further criticisms include that the CTS equates acts which differ greatly in severity, that the context is ignored (i.e., unprovoked assault vs. self-defense, size and weight differences of participants), that it ignores who initiates the violence, that it does not indicate process, sequence, or outcomes, and that it includes only a limited set of violent acts. Straus acknowledges the veracity of these criticisms, and the need to keep such things in mind when interpreting results obtained using the CTS. However, given other characteristics of the CTS, such as the stable factor structure and good reliability and validity, as well as the lack of suitable alternatives, Straus (1990) also asserts that the CTS is probably the "best available instrument to measure intrafamily violence" (p. 72).

In self-report studies of aggression, the possible influence of a social desirability response bias must always be considered. In an attempt to discover the effects of social desirability on respondents' reporting on the CTS, Riggs, Murphy, and O'Leary (1989) combined the CTS with socially desirable and socially undesirable items from the Daily Checklist of Marital Activities (Broderick & O'Leary, 1986, cited in Riggs, et al., 1989). Students were requested to respond to the new Likelihood of Admission Questionnaire in terms of "If you (your partner) had engaged in each of the following behaviours, how likely would you be to report having done them (having them done to you) on an anonymous

questionnaire?" (Riggs et al., 1989, p. 222). The subjects described themselves as significantly less likely to report physical aggression items than other positive and negative interpersonal behaviours. Both male and female subjects were significantly more willing to report their partners' use of the physical aggression tactics than their own. Riggs et al. (1989) reported that this response bias was significantly more pronounced for the severely aggressive items than for the moderately aggressive items.

Sigelman and her colleagues (1984) used the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) to assess relationships between socially desirable responding and scores on the CTS for male and female college students. Although there was no relationship between the two measures for males, for females, both the use and receipt of violence were significantly inversely related to social desirability.

1.2.1 Sex-Differences in Reporting Violence in Dating Relationships

Reports regarding dating violence obtained through the use of the CTS among college students are typically made by individual males and females of violence in their relationships. These men and women are not necessarily partners in the same relationships, nor are their partners necessarily college students. The subjects' experiences of violence include their own use of the violence tactics against their partner, and their receipt of each tactic from their partner (their partners' use of each tactic). Between-group comparisons are typically made between the reports of males and females on both the expressed and received violence

scales. Within-group comparisons are sometimes made on the same variables for males and females separately.

The reported experience of dating violence by males and females is not consistent across studies. In some studies, there were no differences between males and females in the use of or receipt of violence (e.g., Arias et al., 1987; Burke, Stets, & Pirog-Good, 1988; Deal & Wampler, 1986). However, in the majority of published studies, compared to men, women report higher levels of expressed physical aggression (Bernard & Bernard, 1983; Lane & Gwartney-Gibbs, 1985; Lo & Sporakowski, 1989; Makepeace, 1986; Pedersen & Thomas, in press; Plass & Gessner, 1983; Sigelman et al., 1984), while, sometimes, men also report higher levels of received physical aggression (Pedersen & Thomas, in press; Plass & Gessner, 1983; Sigelman et al., 1984). Although there are a number of studies reporting no difference between men and women in the amount of violence received (Bernard & Bernard, 1983; Lane & Gwartney-Gibbs, 1985; Makepeace, 1986), there are no studies in the literature in which male subjects report using violence against their partner more frequently than the female subjects.

Another potentially important aspect of between-group differences in the reporting of physical aggression concerns the tactics used. Sigelman and her colleagues (1984) found that women reported more use of moderate (less injurious) violence tactics against their partners. Men in her study reported more use of severe violence tactics but also reported receiving higher levels of both categories of violence tactics from their partners than did women. Makepeace (1986) also found that

males more often sustained lower level violence (moderate tactics such as pushing, slapping, and biting), but, contrary to Sigelman's findings, females in Makepeace's study sustained more higher level violence (struck with object, beat up).

Makepeace (1986) requested subjects who had experienced violence in their dating relationships to answer questions in a fixed format regarding their perceptions of the "worst incident" of violence. Respondents reported a differential perception of roles, in that females reported being victims nearly twice as often as males, while males reported being the aggressor three times as often as females. These roles were not consistent with the reported rates of violence in the study, since both males and females reported using more violence tactics against their partners than they received from their partners. Though both males and females in Makepeace's study more often reported that the other person first used violence, 35.6% of females reported that their use of violence was self-defensive, while only 18.1% of males reported using violence in self-defense. Other motives reported by respondents included uncontrollable anger (28.3% of males, 24.2% of females), intimidation (21.3% of males, 6.8% of females) and retaliation (16.5% of males, 18.9% of females).

Generalized explanations for higher reported use of violence tactics by women (and lower reported usage of violence tactics by men) have included greater male courtship passivity as a Southern quality, linking it to the ideal of chivalry, or to the men's anxiety not to displease or anger their dating partners (Plass & Gessner, 1983); men

underreporting their use of physical aggression (Bernard & Bernard, 1983); and men exercising greater restraint against the use of physical aggression due to the greater potential for causing harm to their partners, whereas women are not constrained in this way (Arias et al., 1987). Women may also be more compliant in completing the questionnaires, or may be overreporting their own use of violence tactics. It isn't entirely clear why there is differential reporting of the use of violence tactics by men and women; the various speculations made by different researchers may lead one to think that there are multiple reasons.

Lo and Sporakowski (1989), on the basis of their finding that 35.3% of the college women reported using violence against a dating partner while only 20.3% of the men reported using violence against their dating partners, concluded that women were likely to be the aggressors in isolated situations where they need not fear getting caught. Further, they cautioned that "helping professionals may need to plan educational efforts to teach female college students to express their aggression in more socially acceptable, appropriate ways" (p. 437). Given that Lo and Sporakowski did not ask respondents about the precipitants or the outcomes of the violence, it may be premature to conclude that women's use of violence tactics in dating relationships is inappropriate.

Looking at sex-differences in aggression research in general, Eagly and Steffen (1986) reported on the results of a meta-analysis of gender and aggressive behaviour among adult humans. They found that, in

aggression research (conducted generally in labs), males were more likely to aggress than females, and that this difference was greater when the target was male than female. Also, both males and females aggressed more against a male target than a female target. The tendency for males to aggress more than females was significantly larger when aggression was required (by the experimenter) rather than freely chosen. Eagly and Steffen caution that, although their results were significant, sex differences in the use of aggression "are not especially large compared with sex differences in other social behaviours such as helping and nonverbal behaviours" (p. 323).

Besides characteristics of the men and women who respond to the CTS, there is one aspect of the Violence scale which may result in higher rates of expressed violence by women: the fact that it does not account for sexual aggression. Specifically, tactics which men may use while being sexually aggressive are not included on the CTS, while physical tactics commonly used by women defending against sexual aggression are included. Several studies have reported sexual aggression present, to some degree, in many dating relationships (Aizenman & Kelley, 1988; Muehlenhard & Linton, 1987; Rapaport & Burkhart, 1984; Stets & Pirog-Good, 1989), including violent dating relationships (e.g., Burke et al., 1988; Lane & Gwartney-Gibbs, 1985; Makepeace, 1986; Sigelman et al., 1984). None of the latter studies, which assessed both sexual and physical aggression, correlated sexual aggression with dating violence in a meaningful way.

1.2.2 Relevance of Sexual Aggression to Dating Violence

Studies involving college student samples consistently indicate that sexual overtures between dating partners and cohabiting couples are primarily instigated by the man (e.g., Byers & Lewis, 1988; Muehlenhard & Linton, 1987; Peplau, Rubin, & Hill, 1977). In the Byers and Lewis (1988) study, only 64% of male college students said that they simply stopped unwanted advances when the woman said "No", while 58.1% of the female college students reported this to be true of their partners. Rapaport & Burkhart (1984) also found that 35% of college men reported ignoring their dating partner's verbal protests. These results are consistent with Muehlenhard and Linton's (1987) study, in which both men and women reported that the most common method used by men to obtain sex not desired by the partner was "just doing it, even after the woman said no" (p. 193).

Burke and his colleagues (1988) found that men inflicted significantly more sexual aggression and women sustained significantly more sexual aggression. There was no difference between males and females in the reported receipt of physical aggression. Women in his study inflicted more physical aggression (mean = 1.5, SD = 9.3) against their partners than did men (mean = 0.7, SD = 9.3), but this difference was not significant. The current author suggests that the higher mean score for women on the use of physical violence might be related to their higher receipt of sexual aggression.

Lane and Gwartney-Gibbs (1985) also reported males admitted to being significantly more aggressive sexually than did females, while females were more often sexually victimized by their partners than were males. In their study, Lane and Gwartney-Gibbs found women to report higher levels of expressed physical aggression, while there was no difference between the men and women in the levels of received physical aggression. Again, the current author suggests that the differential reporting of the use and receipt of physical aggression may be related to the presence of sexual aggression.

Sigelman and her colleagues (1984) reported that among men there was a "small but significant association between having been sexually aggressive and having been physically aggressive" ($X^2(1) = 5.52$, $p < .01$; p. 538), whereas for women, there was a large and significant association between having been the victim of physical and sexual aggression ($X^2(1) = 30.13$, $p < .0001$). Sigelman et al. asked only two questions regarding sexual aggression; one asked if "strong physical force" was used to obtain sex, the other asked if "violence" was used to obtain sex. Strong physical force and violence are both measured by the CTS, though not necessarily in a context of sexual activity.

Methods used in the previous studies to measure sexual aggression were different in each study. Lane and Gwartney-Gibbs (1985) used the Koss and Oros (1982) Sexual Experiences Survey. This questionnaire asks if you have ever been in a situation where: <u>you had sexual intercourse because</u> (a) your partner (or you) threatened to end the relationship otherwise, (b) you (your partner) felt pressured by your partner's

(your) continued arguments, (c) you (your partner) was very drunk, very stoned, or unconscious; you engaged in kissing, fondling, or sexual intercourse because (d) your partner (you) threatened to use physical force, (e) used physical force, and (f) used a gun. Lane and Gwartney-Gibbs did not report reliability coefficients of this instrument in their study.

Burke, Stets, and Pirog-Good (1988) asked respondents to "indicate the frequency with which they inflicted (or sustained) each of the following activities against their partner's (or own) will in the past year: 1) breast fondling, 2) genital fondling, 3) attempted intercourse that was not successful, and 4) intercourse" (p. 277). Burke and his colleagues reported omega reliabilities of .78 for the inflicting and .80 for sustaining sexual abuse scales.

Stets and Pirog-Good (1989) developed a face valid sexual aggression scale which has a format similar to the violence scale of the CTS. Respondents are asked to indicate whether their partner had committed any of the following sexual acts against their will, and whether they had done so against their partner's will. There are seven items in the scale which increase in severity and intrusiveness: necking, breast/chest fondling, genital fondling, oral sex, attempted intercourse, intercourse without violence, and intercourse with violence. Their scale is also answered by frequency categories, which can be the same categories as those used for the CTS. Due to the similarity of scoring methods, the Stets and Pirog-Good scale will be

used in the current study to assess expressed and received sexual aggression in respondents' dating relationships.

A physical tactic commonly employed by men during an act of sexual aggression is to "hold the woman down" (Koss & Oros, 1982; Muehlenhard & Linton, 1987; Rapaport & Burkhart, 1984). This type of physical aggression or restraint is not listed on the CTS, which allows men who use it to omit it from their reports of use of violent tactics against a dating partner. It is therefore suggested that "Held my partner down/My partner held me down" should be added to the CTS violence scale.

1.2.3 First Aim of the Current Study

From the studies reviewed above, it appears that a woman, in order to stop an unwanted sexual advance, must be prepared to use something other than words. Many of the tactics which may be used by women to defend themselves against sexual aggression (e.g., pushing, shoving, slapping) are assessed by the CTS, while the men's sexually aggressive behaviours may not be. This may be the reason why so many studies of dating violence indicate that women report higher levels of expressed physical aggression than men, and why men report higher levels of received physical aggression than do women. Accordingly, the first aim of the current study is to test this hypothesis by assessing levels of sexual aggression in comparison to levels of physical violence experienced (both expressed and received) by students in dating relationships.

1.3 Correlates of Dating Violence Among College Students

Although the studies of dating violence among college students reviewed above reported relatively high incidences of violence

experiences, it is still possible that differences exist between those students reporting such experiences and those who do not. Possible correlates of dating violence which have been studied to date basically fall into three main categories: relationship characteristics, sex-role typing, and personal characteristics. Relationship characteristics include interpersonal stressors, commitment level, and length of the relationship. Personal characteristics include early life experiences, self-esteem, and personality characteristics. Before beginning a brief summary of the existing literature on these possible correlates of dating violence, it should be noted that many of the correlates which are significant in one study may be non-significant, or inversely related, in subsequent studies. Thus, few conclusions can be drawn. However, this seems an important area of research and, as will be discussed later, one might expect that it might be illuminated by studies on personality correlates of criminal violence.

1.3.1 Relationship Characteristics

All studies which investigated relationship length reported positive correlations with levels of expressed and received physical aggression (Cate et al., 1982; Lane & Gwartney-Gibbs, 1985; Laner & Thompson, 1982; Pedersen & Thomas, in press). The seriousness of the relationship has also been positively correlated with dating violence (Laner & Thompson, 1982; Plass & Gessner, 1983). Using a face-valid questionnaire delineating seven levels of emotional commitment (developed by Billingham, 1987), Pedersen and Thomas (in press) and Stets and Pirog-Good (1987) found commitment level positively correlated

with dating violence. However, Billingham (1987), and Billingham and Sack (1987), using the same questionnaire, found no difference in experienced violence by commitment level, concluding that violence was present and accepted to some degree at even the lowest levels of emotional commitment.

1.3.2 Sex-role typing

Bernard, Bernard, and Bernard (1985) found that Bem Sex Role Inventory (BSRI) scores for women who experienced violence in dating relationships indicated that they were less clearly sex-typed as feminine than those women who had never been abused. In the same survey, males who admitted having been violent toward a dating partner scored as more clearly sex-typed as masculine than males who had never been abusive. Thus, it appeared that "macho" males and non-traditional females may experience more violence in their dating relationships. Conversely, Burke, Stets and Pirog-Good (1988), using a modified version of the bipolar MF scale of the Personality Attributes Questionnaire (PAQ) to determine gender identity, discovered that the less masculine (more feminine) the males and females were, the more likely they were to be both sexually and physically abusive towards their dating partners. Also, these more feminine males and females were more likely to report receiving sexual and physical abuse from their dating partners.

Using the Attitudes Towards Women Scale (AWS) in a sample of college students, Bernard and Bernard (1983) found no reported difference between abusive and non-abusive men; both groups were traditional in their attitudes toward the rights and roles of women in

our society. They also found no difference between abused and non-abused women; both were non-traditional in their attitudes toward the rights and roles of women as measured by the AWS. Social desirability scales were not used in this study and, perhaps, the prevailing attitudes of young people in college were being measured more than anything else. However, though these three studies cannot be said to be definitive, it appears that sex-role typing, as measured by questionnaires, is not a definite correlate of dating violence.

1.3.3 Personal Characteristics

Based on interview impressions, Gibson (1984) reported that teenage victims using support services for battered women experienced low self-esteem related to their involvement in violent dating relationships. Deal and Wampler (1986) found self-esteem to be a significant predictor of dating violence, although it accounted for only 1.0% of the total variance. However, both Makepeace (1987) and Pedersen and Thomas (in press) found no relation between dating violence and self esteem.

Several studies have found a high correlation between present dating assaultiveness and/or victimization and violence experienced and/or witnessed in childhood (Bernard & Bernard, 1983; Laner & Thompson, 1982; Sigelman et al., 1984). For example, Bernard and Bernard (1983) found that 74% of the men and 77% of the women in their study who had used violence against a partner, reported using the same forms of abuse that they had experienced or observed in their families of origin. However, support for the theory of the intergenerational

transmission of violence has not been consistent. Sack, Keller, and Howard (1982) found no relation between the violence experienced by college students and their parents' use of violence. They concluded that "premarital use of aggression may be more a function of other factors, such as personality and/or situational factors" (p. 98), rather than learned behaviour.

Only two studies attempting to measure personality characteristics of college student participants in violent dating relationships have been published to date. Mason and Blankenship (1987) found that, among college students, men with high need for power were significantly more likely to report abusing their partner than were those with lower need for power. Although the CTS was used to assess violence levels, these researchers used a group-administered projective test to assess need for power, and their results have not been replicated.

Koss, Leonard, Beezley, and Oros (1985) used male college students to assess psychological variables associated with two major theoretical models of rape: the psychopathology model and the social control/social conflict model. The Minnesota Multiphasic Personality Inventory (MMPI) Psychopathic Deviate (Pd) scale (Dahlstrom & Walsh, 1960) and the Buss-Durkee hostility inventory (Buss & Durkee, 1957) were used to assess psychopathy; the Sexual Experiences Survey (Koss & Oros, 1982) was used to assess sexual aggression; and social control/social conflict was assessed by the Attitudes Towards Women Scale (Spence, Helmreich, & Stapp, 1973) and Burt's (1980) Rape Myth Acceptance Scales. Subjects were divided into four groups, based on levels of forced sexual activity

as determined by the Sexual Experiences Survey: sexually assaultive, sexually abusive, sexually coercive, and sexually nonaggressive. Although the attitude scales successfully discriminated between the groups, the psychopathy measures did not. Koss and her colleagues concluded that the MMPI Pd scale may not have been appropriate to use with sexually abusive individuals who "were undetected by law enforcement agencies, were college students not prisoners, and had performed their sexual aggression within the context of a social relationship" (p. 990).

Although Koss and her colleagues concluded that differences in degree of psychopathy, as measured by the Pd scale, were not related to sexual aggression, a link between physical/sexual aggression and psychopathy is clearly demonstrated in studies of criminal populations. In a lengthy series of studies, Hare and his colleagues (as reviewed in Hare, 1990) have found violent crimes to be related to psychopathy in the perpetrator. Hare's findings have been supported by Rice, Harris and Cormier (1989), Serin (1991), and Wong (1984). As dating violence is largely unreported, there are no studies linking dating violence to criminal behaviours. However, it is logically possible that men who are violent in intimate relationships may have traits similar to those exhibited by men who are violent in society in general. Personality traits related to the construct of psychopathy may be related to dating violence in a fundamental way.

1.4 Psychopathy-Related Personality Traits

Psychopathy as a clinical construct is based on a collection of personality characteristics and asocial or antisocial behaviours which,

when combined in individuals, form an identifiable pattern. In his well-known text, The Mask of Sanity (1st edition, 1941; 6th edition, 1982), Cleckley delineated 16 critical characteristics in defining the psychopathic personality (see Table 2). That the first three characteristics (charm, intelligence, and lack of psychoneurotic or irrational features) are generally considered positive attributes emphasizes the fact that psychopathic behaviour is not due to obviously disturbed mental functioning, and that such individuals may make attractive dating partners. Cleckley's entire list of characteristics supports the likelihood of finding psychopathic individuals in "normal" groups in society and, indeed some studies have focused on "social" psychopathy as opposed to "criminal" psychopathy.

1.4.1 Psychopathy in Society

Although Hare, currently the world's foremost researcher of criminal psychopathy, based his clinical rating scale directly on Cleckley's list of psychopathy characteristics (Hare, 1980, 1985, 1990), his scale has been criticised for its over-reliance on criminal behaviour as opposed to personality traits. Blackburn (1988), for one, noted the necessity of differentiating personality traits, which describe inferred tendencies, from the socially deviant acts to which they may lead. Blackburn stated that "not all behavioural tendencies are personality traits, since traits also describe the manner, or the "how" of behaving" (p. 506).

Similarly, Schalling (1978) has argued that research on psychopathy in prison populations has given the impression that

Table 2

Characteristics of the Psychopathic Personality (Cleckley, 1982)

1. Superficial charm and 'good' intelligence.
2. Absence of delusions and other signs of irrational thinking.
3. Absence of 'nervousness' or psychoneurotic manifestations.
4. Unreliability.
5. Untruthfulness and insincerity.
6. Lack of remorse or shame.
7. Inadequately motivated antisocial behaviour.
8. Poor judgement and failure to learn by experience.
9. Pathologic egocentricity and incapacity for love.
10. General poverty in major affective relations.
11. Specific loss of insight.
12. Unresponsiveness in general interpersonal relations.
13. Fantastic and uninviting behaviour with drink and sometimes without.
14. Threats of suicide, rarely carried out.
15. Sex life impersonal, trivial, and poorly integrated.
16. Failure to follow any life plan.

psychopathy refers to law-breaking versus law-abiding behaviour rather than a personality construct. Widom (1977) has also noted that theorizing and research on psychopaths has been limited by this focus. She referred to the incarcerated psychopaths as 'unsuccessful' psychopaths, and designed a method for studying 'successful' psychopaths; i.e., those outside of prisons and psychiatric hospitals. The criteria met by Widom's subjects included physical aggression, sexual promiscuity or perversion, impulsiveness, excessive drugs, heavy drinking, poor marital history, and lack of guilt. The results of Widom's investigation indicated that psychopaths do exist outside of prisons, and that they appear to possess many of the traditional distinguishing characteristics. Widom speculated that perhaps an important difference between the successful and unsuccessful psychopaths was the number of convictions, as the successful psychopaths tended to have been arrested on various charges but not convicted.

Widom repeated her study in Bloomington, Indiana (Widom & Newman, 1985) with similar results. Fewer subjects in the second study reported "at least one arrest" (41% in the second study compared to 64.3% in the first study), while more subjects in the second study were found to be impulsive (82.5% in the second study, 57.1% in the first study). Both studies included a small number of females, but there were no significant sex differences. Interestingly, in both studies, more than half of the subjects also reported some college education, up to and including graduate school.

Other researchers have also studied people with psychopathic tendencies in the general population. Smith (1978), in his book, The Psychopath and Society, suggests that traits of the psychopath may be fostered by and especially adaptive to North American culture. He observed that the work ethic gave way after World War II to "a new ethos where heroes must show strong interpersonal skills and a knowledge of how to get the most out of others, presumably for their own benefit" (p. 75). Ray and Ray (1982) using a mail-in questionnaire found significant correlations between elevations on the MMPI Pd scale and the perception of one's self as relating well to others ($r = .22$), not being tough ($r = -.20$), being Machiavellian ($r = .48$) and having a poorer education ($r = -.21$). The correlation between the Pd scale and a social desirability measure was -.32, which they interpreted as psychopaths being exceptionally truthful about themselves. They also found people with intermediate levels of psychopathic traits more common in their sample than people with either very high or very low levels, and suggested that the intermediate levels may be more adaptive.

Sutker and Allain, Jr. (1983), in studying medical students, found evidence that a hallmark of the maintenance of adaptive functioning by antisocially-prone individuals (as assessed by an elevation on the Pd scale of the MMPI > 70) was their ability to inhibit forms of deviant behaviour which would jeopardize their school and career success. The current author hypothesizes that the dating relationship, with its attendant privacy, might provide at least one outlet for the psychopath's uninhibited and assaultive behaviours.

1.4.2 Assessing Psychopathic Traits

Referring to the presence of psychopathic personality traits in people in the general population as "social psychopathy", Smith (1985) developed an 18-item Social Psychopathy Scale (SPS) from items on the MMPI Pd scale, the Machiavellianism scale (Christie & Geis, 1970), and the Zuckerman Disinhibition scale (Zuckerman, 1971). Using the SPS in a study involving 51 male and 36 female Americans studying in West Berlin, Smith reported that, "in order of factorial variance accounted for, the high scoring male might be described as restless, beguiling, and low in guilt and empathy and the female as egocentric, manipulating, restless, and low in empathy" (p. 229). Although the SPS has some merit, it is not yet clear whether its psychometric properties are sound. The scale has only 18 items, low internal consistency (coefficient alpha was .59), and no cross-validation studies have been done in criminal populations.

In the absence of any single measure which clearly differentiates between psychopaths and non-psychopaths in a general population, as mentioned above, elevated scores on the MMPI Pd scale have been used to denote psychopathy. Sutker and Allain (1983), as well as Ray and Ray, used the Pd Scale to determine psychopathy in their samples of "normals". However, elevations on the Pd scale alone have not been successful in distinguishing psychopaths from other criminals, as criminals in general tend to have an elevated Pd scale. Further, the Pd scale was normed on inpatient, court-referred delinquents, presumed to be psychopaths (McKinley & Hathaway, 1944), and may not adequately

represent those aspects of psychopathy which would allow an individual to function outside of an institution.

In the absence of the complete historical information needed to complete Hare's rating scale and/or, in its own right, the Socialization scale (So) of the California Psychological Inventory (Gough, 1975) has been used to distinguish psychopaths from non-psychopaths in criminal populations (e.g., Hare & Cox, 1978; Schalling, 1978). As Gough (1975) noted in the CPI manual, criminals as a group consistently score lower on the So scale than any other group. However, low scorers on the So scale have also been found among college students (Hawke, 1989), and the mean score for volunteers in Widom's studies (Widom, 1977; Widom & Newman, 1985) approximated the mean score listed by Gough for prison inmates. As well, in the Sutker and Allain (1983) study, So scores differentiated between the psychopathic and normal groups defined by the MMPI Pd scores. Since the So scale is a personality measure, its use is not subject to Blackburn's (1988) criticism regarding an over-reliance on criminal behaviour to define psychopathy.

Virtually all researchers of psychopathy consider two of its cardinal traits to be impulsivity and affective poverty or lack of empathy. For example, Craft (1965) defined the two primary features of psychopathy as "a lack of feeling quality to other humans" and "a liability to act on impulse and without forethought" (p. 5). Broadly defined, impulsivity and empathy encompass five of Gough's (1948) ten "common attitudes" characterizing psychopaths, intended to be measured by his So scale (Gough, 1960; Gough & Petersen, 1952). Schalling

(1978), using Gough's scale, concluded there may be two subgroups of criminal psychopaths, one primarily characterized by impulsivity ("restless drifters") and the other by lack of empathy ("cold and callous"). Finally, factor analyses of Hare's rating scale have consistently revealed two primary factors: a core or personality factor involving lack of empathy, and a social deviance factor reflecting impulsive or criminal behaviour (Harpur, Hare, & Hakstian, 1988; Templeman & Wong, 1987).

Sensation seeking and low need for approval are also related to psychopathy in criminals. Sensation seeking, or venturesomeness, is closely related to impulsiveness, but reflects risk-taking attitudes as opposed to acting without forethought. Harpur, Hare, and Hakstian (1989) found sensation seeking to be positively related to Hare's rating scale. In the same study, need for approval, as assessed by the Lie scale of the Eysenck Personality Questionnaire, (Eysenck & Eysenck, 1975) was inversely related to Hare's rating scale. The following sections separately discuss the traits of socialization, impulsiveness, venturesomeness, empathy, and need for approval as they relate to psychopathy and will be assessed in the current study.

1.4.2.1 Low Socialization. The Socialization scale was developed from the inverse scoring of the Delinquency (De) scale, originally designed by Gough on the basis of his role-taking theory of sociopathy (i.e., psychopathy). Gough (1960) pictured socialization as a continuum, "running from persons of exemplary probity and rectitude at one end, through persons of more typical and less beneficent

coadunations (sic) of positive and negative propensities, to persons of frankly errant and wayward impulse at the other" (p. 23). To account for individual differences along the continuum, Gough theorized that the degree to which a person would be able to govern his thought and behaviour to be in accordance with cultural mores would be a "consequence of the depth and validity of the role taking experiences that he has enacted" (p. 24.). Briefly, then, the purpose of the So scale is "to indicate the degree of social maturity, integrity, and rectitude which the individual has attained" (Gough, 1969, p. 10). In summarizing his review of the research using the So scale, Megargee (1972) concluded that "the So scale is one of the best-validated and most powerful personality scales available" (p. 65).

The So scale has consistently been found to inversely correlate with clinical ratings of criminal psychopathy at a modest level of r = -.30. In a study of 58 criminals, conducted by Schalling and Rosen (1975, cited in Schalling, 1978), the correlation between the So scale and a global rating of psychopathy was -0.28 ($p < .05$). In a study involving 274 male prison inmates, Hare (1985) found the correlation between the So scale and his Psychopathy Checklist to be -0.32 ($p < .002$) while the correlation between the So scale and a global clinical rating was -0.29 ($p < .002$). Similarly, in a study involving 60 maximum security penitentiary inmates, Presse (1984) found a correlation between the So scale and the Psychopathy Checklist (Hare, 1980) of -0.30 ($p < .05$).

In using the So scale to define groups of students, military conscripts, and criminals, Schalling (1978) found considerable

psychophysiological similarity between psychopathic criminals and people who score low on the So scale. Psychophysiological correlates of Hare's psychopathy rating scale have been well established (Hare, 1990). Schalling hypothesized a link between psychopathic behaviours, physiological responses, and cognitive functioning, based on two underlying principles. The fundamental principle that psychopathy is a personality syndrome or clustering of traits guided the development of her biosocial methods of measuring those traits and their physiological correlates. The psychopathic traits included low socialization (as defined by Gough and assessed by the So scale), high impulsivity, high monotony avoidance, and high detachment from people (as assessed by an impulsivity-monotony avoidance-detachment [IMD] self-report scale), and low anxiety.

The second tenant, that psychopaths are born different and have different physiological responses, was supported by Schalling's findings that subjects who scored as psychopathic on the combined self-report personality measures were autonomically hyporesponsive (less sweat, less skin conductance, and accelerated cardiac rate) to aversive stimuli. (Among others, Waid, Orne, and Wilson (1979) have also found that low So scorers among college students exhibited smaller electrodermal responses to stressors.) Schalling interpreted her findings as supportive of Gough's (1948) role-taking theory of psychopathy. That is, Schalling (1978) suggested these results may be related to the psychopath's lower sensitivity or attention to cues of imminent unpleasant stimuli, which may manifest at a cognitive level as a lack of ability to fantasize or

imagine a future (potentially unpleasant) event. In the realm of interpersonal relations, the lack of ability to fantasize or anticipate the reactions of the other would be a deficiency in terms of role-taking and empathizing.

Socialization, as measured by the So scale, is inversely related to psychopathy in criminal populations both directly and through physiological variables. Because it is consistent in its relationship to other measures of criminal psychopathy, yet is considered a normal personality measure, the So scale will be used in the current study as a measure of a psychopathy-related trait.

1.4.2.2 Impulsiveness and Venturesomeness. There are currently a large number of self-report measures of impulsivity available. In her study of cognitive factors in psychopathy, Presse (1984) employed seven different self-report "impulsiveness" scales; psychopaths (as determined by Hare's rating scale) scored higher on narrowly-defined impulsiveness scales, but there was no mean difference between groups of psychopathic and non-psychopathic criminals on the scales emphasizing desire for excitement. However, almost all scales (both narrowly defined impulsiveness and desire for excitement scales) were significantly related to psychopathy ratings (five significant r's ranged between .26 and .33). Presse also utilized So scores as a psychopathy measure. Only the three narrowly defined impulsiveness measures were significantly correlated with So scores (r = -.37 with Schalling's (1978) Impulsiveness measure; r = -.48 with the Eysenck's (1978) scale); r = -.41 with the Monroe (1978) Dyscontrol Scale. Presse concluded that

narrowly-defined impulsivity may be a link between socialization and psychopathy ratings.

Interestingly, Schalling (1978) reported finding psychophysiological correlates of "narrow" impulsivity (as measured by her IMD scales) similar to those found in psychopathic subjects. These include longer skin conductance recovery time (longer recovery times being associated with low skin conductance) and large increases in heart rate immediately prior to an aversive or harmful stimulus. Both of these findings are consistent with psychophysiological processes in psychopaths (Hare, 1978). Accelerated heart rate is associated with the ability to ignore (gate out) aversive or stressful stimuli which may, if extreme, be a handicap in the process of socialization.

The concept of impulsivity has been found to be useful in reference to other learning and conduct disorders as well. There is evidence that cognitive and behaviourial components of impulsivity are related to violent and aggressive behaviour in adults (e.g. Hynan & Grush, 1986; Wardell & Yeudall, 1980). In children, the diagnosis of attention deficit disorder overlaps with that of aggressive conduct disorder (Quay & Werry, 1979). Presse (1984) included two cognitive tasks in her study which were derived from the cognitive tasks which Homatidis and Konstantareas (1981) found to most successfully discriminate between hyperactive children and their peers. These tasks also successfully differentiated adult criminal psychopaths from their non-psychopathic peers.

Like Schalling's IMD scales, the Eysencks' impulsiveness questionnaire was designed to separately measure narrow impulsiveness,

venturesomeness (risk-taking, non-planning, and liveliness), and empathy (Eysenck & Eysenck, 1978). The Eysenck's originally used empathy items from the Mehrabian and Epstein (1972) empathy scale, merely as buffer items to add variety to the impulsivity-related items. The original scale has evolved into the current I-7 scale, with the Impulsiveness and Venturesomeness scale clearly measuring different types of impulsivity (Eysenck, Pearson, Easting, & Allsopp, 1985). Polvi (1988), in an inmate population, found the I-7 Impulsiveness scale correlated positively with psychopathy ratings (r = .52) and with total scores from the Buss-Durkee Hostility Inventory (r = .71), which measures hostile attitudes and aggressive behaviour. This confirmed the earlier relationship between impulsiveness and psychopathy ratings determined by Presse (1984; r = .27 with the Eysenck's 1978 scale, r = .33 with Schalling's 1978 scale).

The Eysenck's Venturesomeness scale was based on Zuckerman's (1971) Sensation Seeking Scales. Harpur and his colleagues (1989) found that total scores across Zuckerman's scales correlated with psychopathy ratings ($r \approx .30$) in a criminal population. Similarly, Presse (1984) found that scores on the Eysenck's Venturesomeness scale correlated with psychopathy ratings (r = .27) while scores on Schalling's (1978) Monotony Avoidance scale were also positively correlated with psychopathy ratings (r = .28), although neither measure was significantly correlated with Socialization scores. However, a recent study by Hawke (1989) of college students found that Socialization scores were significantly correlated ($p < .001$) with both I-7

Venturesomeness (r = -.37 for 69 male subjects, r = -.34 for 145 female subjects) and I-7 Impulsiveness (r = -.54 for males, r = -.45 for females). Given these findings, both venturesomeness and impulsivity will be assessed (by the I-7 and the IMD) in the current study.

1.4.2.3 Lack of Empathy. According to Cleckley (1982), the psychopath exhibits a disorder termed "semantic dementia". That is, the psychopath is able to produce socially appropriate verbalizations (for example, "I'm sorry I got you in trouble," "I'm sorry I hurt you") but is not able to feel the emotions behind the words. As a result, he is unable to show empathy or genuine concern for others. This explanation ties in with Gough's role-taking theory of sociopathy: both explain why little of the psychopath's behaviour will be oriented towards, concerned with, or influenced by others.

Results from psychopathy studies using self-report measures of empathy are not consistent. Both Presse (1987), using the IMD empathy measure and I-7 empathy measure, and Bauml (1991), using the I-7 empathy measure, found no relationship between psychopathy (as measured by either the So scale or psychopathy ratings) and empathy in an inmate population. Similarly, Sutker and Allain (1983) found no difference between their group of adaptive psychopaths and normals on scores from Hogan's (1969) Empathy scale. Contrasted to these studies, Harpur et al. (1989) found the IMD empathy measure to correlate with psychopathy ratings. In her study of college students, Hawke (1989) found empathy, as measured by the I-7, to be inversely correlated with venturesomeness in both sexes (r = -.27 for males, r = -.26 for females) and to be

positively correlated with So scores (r = .33) for females. Accordingly, the current study of college students will employ both the IMD empathy measure (detachment) and the I-7 empathy measure.

1.4.2.4 Low Need for Approval. The theoretical underpinnings of an hypothesized low need for approval in psychopaths are more complex. Pathological lying is a psychopathic characteristic assessed by both Hare's rating scale and Robins' (1966) criteria. Robins adds that the psychopath's pathological lying involves providing a fantastic history which doesn't serve to cover up or omit details of the psychopath's antisocial behaviour, while Hare contends that, when confronted with the facts, the psychopath "may simply change his story or attempt to rework the facts so that they appear to be consistent with what he has said" (Hare, 1985b, p. 16). Thus, pathological lying may be more a means of self-aggrandizement for the psychopath than a means of deceit. Lack of guilt and remorse give the psychopath no reason to lie, unless he is trying to manipulate for something. The low socialization characteristic of the psychopath suggests that he may have no social inhibitions against lying, but also may have fewer reasons to lie in many situations. One of these situations may be the completion of self-report questionnaires.

Despite Hare's frequent admonishments (e.g., Hare, 1985a) that one should not trust psychopaths to describe themselves honestly on questionnaires, when these have been assessed, criminal psychopaths generally score lower on measures of dissimulation. Harpur and his colleagues (1989) reported the Lie scale of the Eysenck Personality

Questionnaire was inversely related to psychopathy ratings (r = -.20), and Presse (1987) found a similar relationship (r = -.23). Presse (1987) also noted that socialization scores correlated with the validity scales of the MMPI (L, r = .32; F, r = -.52; K, r = .45).

Crowne and Marlowe (1960, 1964) designed their social desirability scale to assess the need of subjects "to obtain approval by responding in a culturally appropriate and acceptable manner" (p. 353); they cautioned that "socially undesirable responses on the M-C SDS do not imply maladjustment" (p. 353). Bauml (1991) found no difference between psychopathic and non-psychopathic criminals on the basis of M-C SDS. However, in their study of "ambulatory" psychopaths, Ray and Ray (1982) found an inverse relationship (r = -.32) between a short social desirability scale and the MMPI Pd scale, which they interpreted as the psychopaths' exceptional truthfulness. The current study will use the Marlowe-Crowne Social Desirability Scale to assess low need for approval in a non-criminal population, and determine its potential relationship to other psychopathy-related traits and to sexual and physical aggression in dating relationships.

1.4.3 Second Aim of the Current Study

No work has been done to date exploring the potential relationship between psychopathy-related traits and dating violence. The fact that psychopathy is often associated with violent crimes (e.g., Hare & McPherson, 1984) and sexual assaultiveness (e.g., Prentky & Knight, 1988) leads one to suspect that psychopathic traits may well be present among physical and sexual abusers in the general population. Traits which are commonly represented, to some degree, in normal populations

but which are often elevated or depressed in criminal psychopaths include low socialization, high impulsivity, high venturesomeness, lack of empathy, and low need for approval. Therefore, the second aim of the current study is to investigate the presence of such psychopathy-related traits in students who admit to using violence tactics and sexual aggression in their dating relationships.

1.5 Current Research

Many studies have indicated that violence is frequently used during conflict between dating partners. Although it is reportedly used more often in longer relationships, and in relationships involving greater commitment, violence is also not uncommon in brief, uncommitted relationships. These observations suggest that conflict resolution in dating relationships continues to be a topic worth investigating. Research on dating violence most commonly utilizes the Violence scale of Straus' (1979) Conflict Tactics Scales, and this measure was expanded by one item and used in the current study.

In many studies of dating violence, women tend to report higher levels of expressed violence, while men report higher levels of received violence. While this may be due to characteristics of either the men or the women, it may also be due to the fact that the CTS does not measure the tactics used by men during acts of sexual aggression, yet measures the self-defense tactics used by women. The CTS-R Violence scale in the current study was expanded to include one item, "held my partner down/my partner held me down." The experience of sexual aggression was assessed by a measure developed by Stets and Pirog-Good (1989). The first aim of

the current study was to assess the relationship between sexual aggression and violence in dating relationships.

Inconsistencies have been reported by researchers studying such correlates of dating violence as sex-role attitudes, self-esteem, and early life experiences. Only two studies were found which measured personality traits in subjects who reported experience of physical or sexual aggression in their dating relationships. One focused only on an unvalidated projective measure of power needs (Mason & Blankenship, 1987), while the other (Koss et al., 1985) found no relationship between the MMPI Pd measure of psychopathy and sexual aggression.

Psychopathy as a personality syndrome has been seen as present in the general population (e.g., Ray & Ray, 1982; Schalling, 1978; Sutker & Allain, 1983; Widom, 1977,1985), and has been associated with violence and sexual aggressiveness in criminal populations (Hare & McPherson, 1984; Prentky & Knight, 1988; Wong, 1984). Normal personality traits consistently associated with criminal psychopathy on self-report measures include low socialization (as assessed by the Gough's 1960 scale), narrowly-defined impulsivity and venturesomeness (both assessed by Eysenck's 1985 I-7 scale and Schalling's 1978 IMD scale). Low scores on self-report measures of empathy (I-7 and IMD scales) and of need for approval (Crowne & Marlowe's 1960 measure) have been associated with criminal psychopathy in some studies but not in others. They may be relevant to social psychopaths (Ray & Ray, 1982), or low socialization scorers in college students (Hawke, 1989). All these self-report measures were included in the current study with its second aim being to

assess the relationship between psychopathy-related personality traits and the use of physical and sexual aggression towards a dating partner.

The current study used college student volunteers from upper-year classes in the Universities of Windsor and Saskatchewan. Age was requested, as it is a potential control variable. Volunteer subjects completed the expanded CTS-R Violence scale, the Stets and Pirog-Good sexual aggression scale, and the personality scales mentioned above. Subjects who had experienced physical aggression in their dating relationships were also requested to respond to a supplemental questionnaire, describing their perception of their experiences in general. Analyses were completed on the data from Windsor subjects first, with the Saskatchewan subjects being used as a replication sample.

1.5.1 Hypotheses for the Current Study

The first aim of the current study was to assess the relationship between sexual aggression and violence in dating relationships. It was hypothesized that:

1. For women, received sexual aggression would be positively correlated with expressed physical aggression.
2. For men, expressed sexual aggression would be positively correlated with received physical aggression.

The second aim of the current study was to assess the relationship between psychopathy-related personality traits and the use of physical and sexual aggression in dating relationships. It was hypothesized that:

3. Expressed physical aggression would be associated with psychopathy-related personality traits. That is, for both men and women, expressed physical aggression would be inversely correlated with socialization, empathy, and need for approval, and positively correlated with impulsivity, detachment, and monotony avoidance/venturesomeness.
4. Expressed sexual aggression would be associated with psychopathy-related personality traits. That is, for both men and women, expressed sexual aggression would be inversely correlated with socialization, empathy, and need for approval, and positively correlated with impulsivity, detachment, and monotony avoidance/venturesomeness.

No hypotheses were developed regarding personality traits in those receiving either physical or sexual aggression; nor were hypotheses developed regarding the perceptions of dating violence in subjects who report experiencing physical aggression. Results from Saskatchewan subjects were expected to parallel results from Windsor subjects with all hypotheses being relevant to both samples.

2.0 METHOD

2.1 Subjects

At the University of Windsor, 572 students were recruited from upper-year summer (1991) classes in psychology (seven classes), English and biology (one class each), and mathematics, macroeconomics, and business administration (two classes each). At the University of Saskatchewan, 708 students were recruited from upper-year fall (1991) classes in psychology (14 classes), nursing, dentistry, law, veterinary anatomy, economics, commerce, chemistry, agricultural economics, mathematics, civil engineering, biology, and geology (one class each).

Psychology students at the University of Windsor received one or two class credit points (depending on the professor) for participating, while students in other classes and students at the University of Saskatchewan received no incentives of any sort. As the questionnaires were returned anonymously, it is not possible to say precisely what effect the credit points had on the return rate at the University of Windsor, but the majority of questionnaires at the University of Windsor were distributed in (and gathered from) the psychology classes.

Figure 1 provides a graphic analysis of the procedure used to obtain the Windsor sample. Of the 572 research packets distributed at the University of Windsor, 427 were returned. Of those 427, 26 were deleted due to unsigned consent forms or incomplete questionnaires. This resulted in a usable return rate of 70.1%. Of the 401 completed questionnaires, students answering on the basis of non-dating

572 research packets distributed at University of Windsor

↓

427 returned (26 incomplete)

↓

401 students completed questionnaires

(99 were married)

+ (28 were cohabiting)

(127 subjects screened out due to non-dating)

274 remaining subjects:

no differences between these groups on MANOVA

- (153 were going steady)
- (53 were dating casually)
- (68 were not currently dating, but reported on most recent dating relationship)

274 subjects included for current study (86 males, 188 females)

Figure 1.

Subject selection process, University of Windsor.

relationships (marital, n = 99, or cohabiting, n = 28) were screened out. The 274 remaining subjects reported on dating relationships specified as either "going steady" (GS; n = 153), "casual dating" (CD; n = 53), or "most recent dating relationship" (MRD; n = 68). There was no indication made or requested as to whether these subjects were reporting on the basis of heterosexual/homosexual or monogamous/open relationships.

To determine whether responses from the three groups (i.e., GS, CD, and MRD) could be combined for subsequent analyses, a MANOVA was conducted, by relationship type, on all the dependent variables, age, and relationship length. Although the overall effect of relationship status was significant (multivariate F (20, 464) = 2.29, $p < .01$), relationship length was the only variable on which scores differed significantly (univariate F (2, 241) = 15.31, $p < .001$). Students going steady were in longer relationships (M = 25.11 months) than students dating casually (M = 9.58 months) or reporting on MRD relationships (M = 13.14 months). There were no differences between the relationship status groups on the four dependent variables of expressed and received physical and sexual aggression, the main variables of interest.

To further ensure that subsequent sex differences in the dependent variables were not due to undetected sex differences in the relationship types, a chi-square analysis was conducted (relationship type by sex). As the chi-square was also non-significant (X^2(2, n = 274) = 1.55, p = ns), the three groups were combined for further analyses, creating a total N of 274 subjects, 188 women (68.6%) and 86 men (31.4%). The age

range for this sample was 18 - 60 years, with a mean age of 24.2 years (SD = 6.76). The mean age for females was 24.1 years (SD = 6.93), and the mean age for males was 24.3 years (SD = 6.40).

Figure 2 indicates that, of the 708 research packets distributed at the University of Saskatchewan, 245 were returned. Again, twenty six were incomplete or unsigned, and of the 219 remaining (usable return rate of 30.9%), 45 were screened out because they were not completed on the basis of dating relationships. The final Saskatchewan sample consisted of 174 subjects of which 118 (67.8%) were women and 56 (32.2%) were men. The age range for the Saskatchewan sample was 18 - 51 years with a mean age of 21.4 years (SD = 3.98). The mean age for females was 21.0 years (SD = 3.06) and the mean age for males was 22.2 years (SD = 5.41).

2.2 Procedure

A letter (Appendix A) was sent to the heads of various departments and schools at each university, introducing the author and explaining the purpose of the current study. The letter included a copy of the proposal summary (used to obtain permission from the ethics committee), a copy of verbatim instructions to subjects, a copy of the questionnaires (including the consent form), and information regarding availability of results. The letter requested the head of the department (or school) to refer the material to one or two professors in the department who might allow the author to come into their 2nd or 3rd year classes to recruit subjects. Upper-year classes were selected to increase the probability that the respondents were answering on the

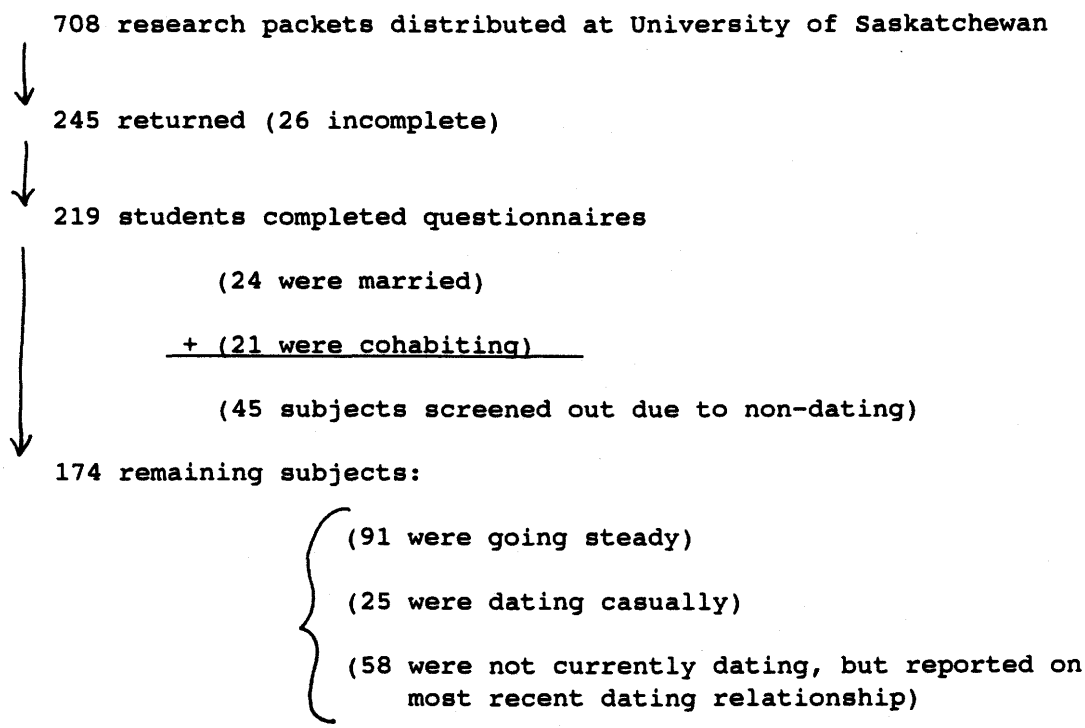

Figure 2.

Subject selection process, University of Saskatchewan.

basis of dating relationships established at university as opposed to high school. However, this was not a requirement for participation in the study. The professors were subsequently contacted by the author in order to arrange a suitable class period for distribution of the research packets.

The author spoke for about 10 minutes to the class, explaining the purpose of the research. Students were advised that their responses would be held in confidence, identified only by a research code number, that the accompanying consent form must be signed to allow the researcher to use the information provided by them, and that their participation was entirely voluntary (see Appendix B for verbatim instructions). Students were given research packets during class time, with the instruction to complete them on their own time, and return them to the next meeting of the class. Research packets were distributed by passing the packets down the rows, with students who had agreed to participate keeping a packet and passing on the rest. Students who were not able to participate were requested to not take a packet. Students were requested to complete the questionnaires on their own time and return the completed packet to the next meeting of their class, where the author would collect them.

Appendix C contains a copy of the packet contents. Each research packet consisted of two consent forms (one for the subject to keep, with phone numbers of the author and the supervising professor, the other to return with the completed research packet), a page asking for age, sex, and type of relationship (married, cohabiting, going steady, casual

dating, or most recent dating relationship), followed by the questionnaires consisting of the M-C SDS, the So scale, Eysenck's I-7 scales, Schalling's IMD scales, the CTS-R, and the sexual aggression scale. A final, supplementary page, only for those students who had experienced (either expressed or received) physical aggression in their relationship, asked for respondents to indicate their perception of whether they or their partners were the victim, the number of occasions they had experienced physical aggression, and the reasons they/their partner had used aggression. The first and last pages requested subjects to place their answers directly onto the pages, while University of Saskatchewan Op-scan sheets were provided for responding to the questionnaires. The consent forms, questionnaires, and op-scan sheets were contained in a 9' x 12" manilla envelope; the packets distributed at the University of Windsor also included a mailing label for subjects who wished to have a feedback statement mailed to them.

In the Saskatchewan sample, a preliminary, written "debriefing" was provided to participants from the Department of Psychology. After the data was analyzed, more comprehensive written feedback was made available to the students from Psychology and the other departments who had participated. For the Windsor students, the feedback was mailed to those who had supplied the researcher with their names and addresses. Copies of the debriefing and feedback statements for the Saskatchewan and Windsor students are in Appendix D.

2.3 Measures

2.3.1 Measures of Aggression

2.3.1.1 Physical Aggression. As explained in the Introduction section, the CTS is the measure most commonly used to assess violence in premarital and marital relationships. Straus (1979) reported mean item-total correlations of .87 and .88 for husbands and wives, respectively, on the violence scale with a coefficient alpha of .88 in his sample of married and cohabiting couples. Validity of the CTS violence scale was demonstrated by Straus (1979) in that responses on the violence scale were found to converge substantially with information obtained in in-depth interviews. In the current study, a revised version of Straus' 1979) CTS, developed by Josephson and Check (1990) was used to assess the use of physical aggression tactics in subjects' relationships. It was thought that the increased length of Josephson and Check's revision (43 items versus 19 items on the original CTS) might increase the likelihood of subjects' reporting their experience of violence in their dating relationships, since the number of items permitted them to indicate that they had tried a variety of other means to resolve the conflict. (This was Straus' (1979) rationale for including items other than violence items in his original scale.) The original violence scale was unchanged by Josephson and Check, but one item was added for the current study: "Held my partner down/my partner held me down." This was added as it is reportedly used by men during acts of sexual aggression (e.g., Koss & Oros, 1982; Muehlenhard & Linton, 1987; Rapaport &

Burkhart, 1984), and it was expected to increase men's reported use of physical aggression against their dating partners.

Josephson and Check's (1990) revised version of the CTS permits assessment of conflict resolution tactics across five rather than three domains; Reasoning (9 items; e.g., "discussed the issue"), Escalation/blame (9 items; e.g., "said my partner was being selfish"), Avoidance (7 items; e.g., "gave in, just to avoid conflict"), Indirect approach (9 items; e.g., "refused to do things for my partner"), and Violence (9 items; e.g., "pushed, grabbed, or shoved"). The CTS-R is administered twice -- once to determine the use of each tactic by the respondent (Expressed Physical Aggression), and again to determine the use of each tactic by the respondent's partner (Received Physical Aggression). On the CTS-R, the items in each scale are listed in order of escalating coercion or force; each item is rated on a seven-point ordinal scale where 0 = never, 1 = once, 2 = twice, 3 = three to five times, 4 = six to 10 times, 5 = 11 to 20 times, and 6 = more than 20 times. The maximum possible score for each scale is thus six times the number of items. Although the entire revised CTS was administered, only the Expressed and Received Violence scales were of interest. Since the original nine items of the violence scale were increased by one item to ten, the maximum total score on these two violence scales was 60. Given that the total score reflects both the number of items chosen and the frequency of each item chosen, higher scores may indicate the use of higher level (more severe) tactics, or more frequent use of lower level tactics, or both.

Josephson and Check had subjects report only on their use of each tactic. They included scores from subjects in married and cohabiting relationships in their sample, and reported coefficient alpha for the Expressed violence scale equal to .68. The reason for the relatively low alpha in their study is not clear. In the current study, coefficient alpha was .88 for Expressed Physical Aggression and .90 for Received Physical Aggression.

No mean scores on the CTS scales are available in the research literature. However, mean scores from the author's previous research (Pedersen & Thomas, in press) are provided in Table 3.

2.3.1.2 Sexual Aggression. For reasons discussed in the Introduction section (please see page 17), the seven item scale devised by Stets and Pirog-Good (1989) was used to assess sexual aggression in the current study. On the Stets and Pirog-Good scale, respondents are asked if they have used the following tactics against their partner's will, or if they have sustained the following tactics from their dating partner against their will:

1) necking
2) chest/breast fondling
3) genital fondling
4) oral sex
5) attempted intercourse
6) intercourse without violence
7) intercourse with violence

Respondents answer the questions on the basis of the same frequencies used for the revised CTS: a seven-point ordinal scale. Thus, the maximum score on this scale is 42. Stets and Pirog-Good (1989) referred to their scale as "face-valid". They did not provide a

Table 3

Means and Standard Deviations of Expressed and Received Physical Aggression for Those Who Experienced Violence and for the Total Sample (from Pedersen and Thomas, in press)

	Experienced Violence*		Total Sample	
	Males (n = 24)	Females (n = 52)	Males (n = 50)	Females (n = 116)
Expressed Physical Aggression	1.6 (3.0)	4.2 (5.0)	.77	1.88
Received Physical Aggression	6.0 (8.7)	1.8 (3.2)	2.88	.81

*These mean scores are based only on the scores of those who had experienced violence (either expressed or received).

reliability coefficient. Since they transformed their subjects' scores to dichotomous (had/had not experienced each tactic) for their statistical analyses and summed them over a number of relationships, their scores are not comparable to those of the current study. In the current study, coefficient alpha was .89 for the Expressed Sexual aggression scale and .89 for the Received Sexual aggression scale.

2.3.1.3 Supplemental Information. The questions in this measure are similar to those used by Makepeace (1986). These questions were designed to obtain more specific information relevant to the interpretation of the scores on the physical aggression scales, such as the number of occasions when physical aggression was used, who was the victim, and the respondent's perceptions of why the physical aggression was used by them and/or their partner. Subjects who reported any experience of physical aggression (either used or received) were asked to complete the section containing these questions. The wording of the actual questions used is given in Appendix C.

2.3.2 Psychopathy-Related Traits

For all of the scales used to assess psychopathy-related traits, table 4 presents mean scores obtained from samples which are similar to the current sample, or pertinent to the construct being measured. The rationale for choosing each of these scales is given in the Introduction (p. 28) along with information regarding their development. Alpha coefficients ranged from .67 to .83 for the personality measures in the current sample, above the level of .60 suggested by Nunnally (1978) as necessary and sufficient for research purposes.

Table 4

Mean Scores on Personality Measures taken from Gough (1987), Hauke (1989), Presse (1984), and Veld (1992)

	Gen'l Program (College)		Grad Students		Inmates		Hauke (1989)		Veld (1992)		Presse (1984)	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Psycho-paths	Non-psycho paths
n =	3236	4126	623	485	196	345	69	145	47	36	18	15
Socialization	35.5 (5.2)	37.5 (4.7)	38.7 (4.3)	32.1 (3.5)	22.8 (5.3)	23.2 (6.1)	35.5 (5.8)	37.5 (6.7)	29.1 (6.8)	29.5 (5.9)	21.6 (5.1)	26.7 (5.3)

		Eysenck (1985)		Corulla (1988)							
		Males	Females	Males	Females						
Eysenck' I-7	n =	97	191	58	134						
Impulsivity		7.9 (4.1)	9.8 (4.2)	8.8 (4.5)	8.4 (4.5)	7.2 (3.7)	6.7 (3.8)	8.6 (nr)	9.8 (4.5)	7.8	4.5
Venturesomeness		10.3 (3.7)	8.7 (3.9)	10.6 (3.4)	8.7 (3.6)	11.3 (2.5)	8.5 (3.3)	11.4 (2.9)	8.1 (3.7)	9.7	7.4
Empathy		11.8 (3.2)	14.4 (2.9)	12.6 (3.4)	14.7 (3.0)	11.1 (2.6)	14.0 (2.8)	10.3 (3.9)	14.3 (2.7)	11.4	11.7
Schalling's IMD											
Impulsivity						—	—	15.1 (4.9)	15.4 (3.8)	16.6 (4.8)	12.7 (4.7)
Monotony Avoidance						—	—	10.0 (4.3)	16.6 (5.4)	15.4 (5.7)	13.0 (4.7)
Detachment						—	—	13.7 (3.5)	12.1 (4.0)	nr	nr

Note. The General Program, Grad Students, and Inmates' scores are from Gough (1987). Presse's I-7 scores are prorated from Eysenck's VIE, an earlier version of the I-7. Eysenck's I-7 scores are norms from the age 20 to 29 years group, and and Corulla's I-7 scores are from a British undergraduate population.

2.3.2.1 Socialization. The Socialization (So) scale of the CPI (Gough, 1975) consists of 54 items in a true/false format, and was administered to assess the level of socialization of the respondents. A test-retest reliability of .80 for 200 prison males is listed in the CPI manual (Gough, 1975). Although the Socialization scale is factorially complex (Rosen & Schalling, 1974), measures of internal consistency tend to be relatively high. Rosen and Schalling (1974) reported a K-R-20 of .810, and coefficient alpha for the scale in the current sample was .74.

The construct validity of the So scale is demonstrated by the rank ordering of the results of cross-validation studies on a wide range of groups. The resultant lists (by sex), as presented in the CPI manual (Gough, 1975), demonstrate a socialization-asocialization continuum, with high scorers representing "more socialized" groups and low scorers representing "less socialized" groups.

The revised manual (Gough, 1987) does not provide the rank ordering lists, and new norms (mean scores) are presented for the groups which are primarily of interest in the present study. Table 4 contains the revised norms for college students in a general program, graduate students, and inmates.

2.3.2.2 I-7 Impulsiveness Questionnaire. The I-7 Impulsiveness questionnaire (Eysenck et al., 1985) consists of 54 yes/no items, and was administered to assess levels of impulsivity, venturesomeness, and empathy. Construct validity of the three scales is supported by their correlations with Hare's psychopathy rating scale (Hare, 1990; Presse, 1984). As reported by Eysenck and her colleagues, reliabilities for

impulsiveness were .84 for males and .83 for females, reliabilities for venturesomeness were .85 for males and .84 for females, and the reliability for empathy was .69 for both males and females. In the current sample, coefficient alpha for impulsivity was .67 for the total sample, coefficient alpha for venturesomeness was .81, and coefficient alpha for empathy was .83.

Table 4 contains Eysenck's (1984) British norms for the 20-29 year age group, Corulla's (1988) mean scores from a British university population, Hawke's (1989) mean scores from a first-year university population, and Veld's (1992) mean scores from an adult education population. As well, Presse's (1984) transposed scores from psychopathic and non-psychopathic inmates are included. The latter scores are transposed from the VIE (Eysenck & Eysenck, 1978), an earlier version of the I-7, measuring the same constructs.

2.3.2.3 Impulsivity/Monotony Avoidance/Detachment. The IMD scale (Schalling, 1978) consists of 30 items, 10 per scale. A four-point ordinal scale is used for scoring, with 0 = mostly false, 1 = somewhat false, 2 = somewhat true, and 3 = mostly true. Presse (1984) reported test-retest reliability for impulsivity (r = .74) and monotony avoidance (r = .65). Construct validity of the I, M, and D scales is supported by their significant correlations with Hare's psychopathy rating scale (Harpur et al., 1989, Presse, 1984). Coefficient alpha computed in the current sample for impulsivity was .79, for monotony avoidance was .83, and for detachment was .70.

Table 4 contains mean scores from Veld (1992) and Presse (1984) on the IMD scales. The mean scores reported are from inmates, and may therefore be higher than a college student population. However, they are relevant to the construct of psychopathy and are therefore included here.

2.3.2.4 Need for Approval. The Marlowe-Crowne Social Desirability Scale (M-C SDS; Crowne & Marlowe, 1960) was used to assess the respondents' need for approval. The M-C SDS is composed of 33 True/False items drawn from a "population of culturally acceptable and approved behaviours which are, at the same time, relatively unlikely to occur" (Crowne & Marlowe, 1960, p. 354). The internal consistency coefficient of the scale is .88, with a test-retest reliability of .89 (Crowne & Marlowe, 1960). In the current sample, coefficient alpha was .76. Crowne and Marlowe (1964) reported mean scores for males (n = 666, mean = 15.06, SD = 5.58) and females (n = 752, mean = 16.82, SD = 5.50), gathered from introductory psychology students at Ohio State University.

3.0 RESULTS

The data collected from subjects at the University of Windsor is first described on the basis of subjects' scores on the measures to allow comparisons with other studies. These descriptions are followed by the analyses necessary to test the hypotheses regarding the relationships between the aggression variables for each sex. The hypothesized relationships between the use of aggression and the psychopathy-related personality traits are then examined. The results of the supplemental questionnaire are explained last, followed by a final section describing the results of the analyses of the data from the replication sample, collected from students at the University of Saskatchewan.

3.1 Descriptions of Subjects' Scores on All Measures Used

3.1.1 Distribution of Scores. The Kolmogorov-Smirnov test for "goodness of fit" to a theoretical normal distribution was used to determine whether the data for each of the personality and violence variables met this assumption. Table 5 provides the results of the analysis. The personality variables may be considered to meet the assumption of normality. The violence variables, however, clearly do not meet the assumption (p's < .001), and no appropriate data transformations were found. The non-normality of these distributions is due primarily to the large number of respondents who received a score of zero on these scales, resulting in distributions which are extremely positively skewed. Although the distributions on these variables are non-normal, parametric statistics were used to analyze this data. The

Table 5

Kolmogorov-Smirnov Tests of Subjects' Scores: Goodness of Fit to a Theoretical Normal Distribution

Measure	Mean (SD) (N = 274)	Two-Tailed Probability	Data Transformation	Two-Tailed Probability
Physical Aggression Expressed	2.12 (5.3)	.000	none found	
Received	3.09 (6.8)	.000	none found	
Sexual Aggression Expressed	2.21 (5.4)	.000	none found	
Received	3.64 (7.2)	.000	none found	
Socialization	33.46 (6.4)	.243		
Need for Approval	14.50 (5.1)	.072		
Eysenck's Impulsivity	8.24 (4.4)	.182		
Empathy	13.10 (3.2)	.131		
Venture-someness	9.54 (3.8)	.289		
Schalling's Impulsivity	14.36 (5.8)	.208		
Detachment	10.80 (5.0)	.112		
Monotony Avoidance	17.01 (5.9)	.493		

main reason for this is that, to date, no studies investigating dating violence have included data transformations, although parametric statistics have been used to analyze the data. In addition, the parametric statistical techniques used in the current study (multiple analysis of variance, multiple regression) are considered robust with regards to violation of this assumption (Pedhazur, 1982; Tabachnik & Fidell, 1989).

To ensure that the parametric correlations based on the current, skewed distributions were not misrepresentative, the violence variables were subjected to a nonparametric correlational analysis (see Appendix E for Pearson r and Spearman G correlations). The correlations do not appear to change dramatically between the parametric and non-parametric analyses. For example, for the total sample, the parametric correlation between expressed and received physical aggression is .679 ($p < .001$), while the non-parametric correlation for the same variables is .607 ($p < .001$).

3.1.2 Percentages of Subjects Experiencing Aggression. Of the total sample, 46.7% of subjects (n = 128, 53 men and 74 women) reported experiencing at least one incident (expressed or received) of physical aggression. When examined by sex, a significantly higher percentage of male subjects than female subjects indicated experiencing at least one act of physical aggression (60.2% and 39.4%, respectively; X^2 (1) = 11.20, $p < .001$). Regarding the experience of sexual aggression, 42% of the total sample (n = 115, 41 men and 74 women) reported at least one experience (expressed or received) of this form of aggression. However,

the percentage of males and females reporting the experience of sexual aggression was roughly equivalent (47.7% and 39.4%, respectively; X^2 (1) = 1.67, p = .196). On the physical aggression scales, these experiences may range from throwing something to using a knife or gun, while on the sexual aggression scales, the experiences range from unwanted necking to intercourse with violence.

Table 6 shows the rate of experience, in percentages, of each tactic. For each one of the physical or sexual tactics, a minimum of four subjects (4.7% of males and 2.1% of females) reported at least one experience (expressed or received) including the most severe - use of a knife or gun and intercourse with violence. For each physical aggression tactic, more males reported receiving the tactic than males or females reported expressing the tactic, or females reported receiving the tactic. This was particularly surprising with items such as "kicked, bit, or hit with a fist", which 31.4% of males reported receiving compared to 7.4% of females while only 11.6% and 9.0% of males and females, respectively, reported expressing it.

For each sexual aggression tactic in Table 6 (except "intercourse without/with violence"), more males reported expressing the tactic than males or females reported receiving the tactic, while more females, as expected, reported receiving than expressing each tactic. However, surprisingly, more males than females reported receiving each tactic (including "intercourse without/with violence") except "breast/chest fondling" (22.1% males, 24.5% females).

Table 6

Percentage of Respondents Who Reported Expressing and Receiving Specific Physical and Sexual Aggression Tactics by Sex

	Expressed		Received	
Physical Aggression Tactics	Male (n = 86)	Female (n = 188)	Male (n = 86)	Female (n = 188)
Threw something	12.8	17.6	33.7	6.4
Pushed, grabbed, or shoved	20.9	20.2	43.0	22.9
Slapped	15.1	13.8	31.4	9.0
Held down	24.4	5.3	18.6	14.4
Kicked, bit, or hit with fist	11.6	9.0	31.4	7.4
Hit (or tried) with something	9.3	10.1	29.1	5.3
Choked	8.1	2.7	14.0	4.8
Beat up	9.3	3.2	10.5	4.3
Threatened with a knife/gun	7.0	3.7	14.0	5.9
Used a knife/gun	5.8	2.1	11.6	2.1
Total: One or more of above tactics	40.7	30.9	55.8	30.3

Table continues

Table 6 (continued)

Percentage of Respondents Who Reported Expressing and Receiving Specific Physical and Sexual Aggression Tactics by Sex

	Expressed		Received	
Sexual Aggression Tactics	Male (n = 86)	Female (n = 188)	Male (n = 86)	Female (n = 188)
Necking	30.2	11.7	26.7	24.5
Breast/Chest fondling	34.9	10.1	22.1	24.5
Genital fondling	32.6	10.1	26.7	18.6
Oral sex	22.1	5.3	19.8	18.1
Attempted intercourse	24.4	8.0	22.1	20.7
Intercourse w/o violence	12.8	5.9	12.8	12.2
Intercourse w/ violence	4.7	2.7	7.0	5.3
Total: one or more of above	44.2	19.1	36.0	37.2

Note. Columns total to more than 100 as subjects may endorse more than one item.

In order to illustrate the complexity of total scores on the violence scales, Appendix F provides the percentage of male subjects reporting the expression of each physical aggression tactic by frequency category. Appendix F also provides a table reporting the results of the MANOVA of the items within the expressed and received physical and sexual aggression scales. Although males and females differed significantly on mean scores on several of the received physical aggression tactics, the only expressed physical aggression tactic on which they differed was "held my partner down". Men scored significantly higher on this tactic (mean = .62, SD = 1.4) than did women (mean = .10, SD = .5; F (1, 272) = 20.94, $p < .001$).

3.1.3 Mean Scores on Variables. Table 7 provides the mean scores for males and females separately, on the personality and aggression measures. Regarding the potential control variable of age, males (mean age = 24.30, SD = 6.40) did not differ significantly from females (mean age = 24.11, SD = 6.93; F (1, 272) = .05, p = .824). Therefore, age was not employed as a control variable when examining sex differences.

The mean scores on the personality variables are roughly comparable to those found by Hawke (1989) in a similar population, as listed in the method section. For example, Hawke reported mean scores on the I-7 Impulsiveness scale for males and females of 7.2 and 6.7, respectively, while mean scores on the same scale in the current sample were 7.8 and 8.4 for males and females, respectively. The mean scores on the aggression variables are higher than those found by Pedersen and Thomas (in press) in a similar study using University of Windsor

Table 7

Means, Standard Deviations, and Ranges of Scores on Personality and Violence Measures for Males and Females

Personality Measure (Range)		Males (n = 86)	Females (n = 188)
Socialization (0 - 54)	M	32.395	33.952
	SD	6.144	6.471
Eysenck's Impulsivity (0 - 19)	M	7.791	8.441
	SD	4.257	4.493
Empathy (0 - 16)	M	11.233	13.952
	SD	3.314	2.683
Venturesomeness (0 - 19)	M	10.663	9.027
	SD	3.296	3.851
Schalling's Impulsivity (0 - 30)	M	13.942	14.553
	SD	5.487	5.880
Detachment (0 - 30)	M	12.430	10.059
	SD	5.038	4.760
Monotony Avoidance (0 - 30)	M	16.884	17.069
	SD	5.281	6.116
Need for Approval (0 - 54)	M	13.942	14.755
	SD	5.277	6.933
Expressed Physical Aggression (0 - 60)	M	2.593	1.899
	SD	5.601	5.101
Received Physical Aggression (0 - 60)	M	5.663	1.910
	SD	8.363	5.608
Expressed Sexual Aggression (0 - 42)	M	4.372	1.218
	SD	7.546	3.722
Received Sexual Aggression (0 - 42)	M	3.884	3.521
	SD	7.863	6.933

students. For example, Pedersen and Thomas reported mean scores on the Received physical aggression scale of 2.9 for males and .8 for females, while mean scores in the current sample are 5.7 for males and 1.8 for females.

3.2 Relationship Between Physical and Sexual Aggression for Males and Females

3.2.1 Scoring Patterns for Males and Females

The total sample was divided according to sex to permit examination of possible differences between males (n = 86) and females (n = 188) in their experiences of physical and sexual aggression. A multiple analysis of variance (MANOVA) was performed to assess between-group differences on the four variables: expressed and received physical aggression and expressed and received sexual aggression. These results are presented in Table 8. As well, the percentage of male and female respondents reporting at least one experience of each of the four violence scales is repeated here.

The overall F for the MANOVA was significant ($p < .001$). F statistics for the individual variables indicated that males and females did not differ significantly with regard to Expressed Physical Aggression or Received Sexual Aggression. However, F statistics for Received Physical Aggression and Expressed Sexual Aggression were highly significant ($p < .001$), with males reporting higher levels of both than females. T-tests indicated that there were also within-sex differences in the experience of violence. Males reported higher levels of received physical aggression than expressed physical aggression (t = 4.18, $p <$

Table 8

Means, Standard Deviations, Range, and Percent of Respondents Reporting Physical and Sexual Aggression by Sex

Scale		Male (n = 86)	Female (n = 188)	F (1, 272)	p
Expressed Physical Aggression	M	2.593	1.899	1.03	.312
	SD	5.601	5.101		
	Range	0 - 32	0 - 33		
	% of n	40.7	30.9		
Received Physical Aggression	M	5.663	1.910	19.12	.000
	SD	8.363	5.608		
	Range	0 - 36	0 - 41		
	% of n	55.8	30.3		
Expressed Sexual Aggression	M	4.372	1.218	21.49	.000
	SD	7.546	3.722		
	Range	0 - 36	0 - 28		
	% of n	44.2	19.1		
Received Sexual Aggression	M	3.884	3.521	.15	.701
	SD	7.863	6.933		
	Range	0 - 36	0 - 33		
	% of n	36.0	37.2		

Note. Multivariate (Wilk's Lambda) F (4, 269) = 13.78, $p < .001$. The potential range of scores on the physical aggression scales is 0 - 60; potential range of scores on the sexual aggression scales is 0 - 42.

.001), while females reported equivalent levels of both expressed and received physical aggression (t = .04, p =.968). For sexual aggression, a reverse pattern from physical aggression emerged. Females reported higher levels of received sexual aggression than expressed sexual aggression (t = 5.18, p <.001), while the difference between expressed and received sexual aggression for males was not significant (t = .92, p = .359).

3.2.2 First Aim of the Current Study

The first aim of the current study was to assess levels of expressed and received sexual aggression in comparison to levels of expressed and received physical aggression experienced by students in dating relationships. Accordingly, the intercorrelations among the violence variables were examined, by sex, to determine whether hypotheses 1 and 2 were supported. Hypothesis 1 predicted that, for females, the use of physical aggression would be associated with the receipt of sexual aggression. As indicated in Table 9, the predicted correlation was found: expressed physical aggression by women was positively correlated (r = .277) with received sexual aggression (p < .001). However, the correlation between expressed and received physical aggression (r = .776, p < .001), is of significantly greater magnitude (t (185) = 10.00, p < .001). Thus, compared to the receipt of sexual aggression, the receipt of physical aggression is more clearly related to expressed physical aggression for women. Although the correlations between expressed physical and sexual aggression (r = .349) and between expressed and received sexual aggression (r = .480) also appear to be of

Table 9

Intercorrelations Between Physical and Sexual Aggression for Females

	Physical Aggression Expressed	Physical Aggression Received	Sexual Aggression Expressed	Sexual Aggression Received
Physical Aggression Received	.776 ***	--		
Sexual Aggression Expressed	.349 ***	.244 ***	--	
Sexual Aggression Received	.277 ***	.399 ***	.480 ***	--

*** p < .001

greater magnitude than the correlation between expressed physical and received sexual aggression, these differences are not significant (*t*'s (185) = 1.007 and 1.827, respectively; *p*'s = ns.). Interestingly, the correlation between received physical and expressed sexual aggression in women (*r* = .244) is almost identical to that between the reverse variables.

A backward stepwise multiple regression was performed to determine which combination of violence variables accounted for the most variance in the use of physical aggression by the female subjects in the sample. Backward stepwise regression analysis was used because it allows all of the independent variables (IVs) to be entered, and the variables contributing the least amount of unique variance are systematically deleted. Table 10 presents the results of the multiple regression for females. The adjusted R^2 of .64 for the regression equation was statistically significant ($p < .001$). The combined variables accounted for 63.7% of the variance in expressed physical aggression. No variables met the criteria for removal, indicating that all three variables were significant contributors to the variance in expressed physical aggression. However, Table 10 makes it clear that most of the explained variance in expressed physical aggression is accounted for by received physical aggression (50%), while expressed sexual aggression accounts for 4%, and received sexual aggression accounts for only 1%; the remaining 8.7% is shared variance.

Hypothesis 2 predicted that, for men, the receipt of physical aggression would be positively correlated with the use of sexual

Table 10

Multiple Regression for Females of Expressed Physical Aggression on the Remaining Aggression Scales

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
EXPRESSED PHYSICAL AGGRESSION	.80	.64	.64	110.40	.000						
Received Physical Aggression						.78	.50	.71	.78	16.14	.000
Expressed Sexual Aggression						.35	.04	.31	.23	4.52	.000
Received Sexual Aggression						.28	.01	-.10	-.14	-2.67	.008

Note: sr^2 (unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

aggression. As indicated in Table 11, the predicted correlation was again found: received physical aggression was correlated (r = .434) with expressed sexual aggression (p < .001). However, the correlation between received and expressed sexual aggression (r = .798, p < .001) was of significantly greater magnitude (t (83) = 5.126, p < .001). Although the correlation between received and expressed physical aggression (r = .586, p < .001) also appeared to be of greater magnitude than the correlation between expressed sexual and received physical aggression, this difference did not reach significance (t (83) = 1.668, p = ns.) Thus, it appears that, for men, expressed sexual aggression is more strongly related to received sexual aggression than to received physical aggression.

A backward stepwise multiple regression analysis was again conducted to determine the amount of variance in received physical aggression accounted for by the combination of the remaining violence variables. Table 12 presents the results of the multiple regression for males. The adjusted R^2 of .39 for the regression equation was statistically significant (p < .001). The combined IVs accounted for 38.2% of the variance in received physical aggression. Received sexual aggression met the criteria for removal, leaving both expressed physical and expressed sexual aggression in the final equation, accounting for 38.6% of the variance of received physical aggression. Again, Table 12 makes it clear that most of the explained variance in received physical aggression is accounted for by expressed physical aggression (21%),

Table 11

Intercorrelations Between Physical and Sexual Aggression for Males

	Physical Aggression Expressed	Physical Aggression Received	Sexual Aggression Expressed	Sexual Aggression Received
Physical Aggression Received	.586 ***	--		
Sexual Aggression Expressed	.362 ***	.434 ***	--	
Sexual Aggression Received	.368 ***	.352 ***	.798 ***	--

*** p < .001

Table 12

Multiple Regressions for Males of Received Physical Aggression on the Remaining Aggression Scales

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
RECEIVED PHYSICAL AGGRESSION	.63	.40	.39	27.71	.000						
Expressed Physical Aggression						.59	.21	.75	.50	5.42	.000
Expressed Sexual Aggression						.43	.06	.36	.33	2.80	.006
Removed											
Received Sexual Aggression						.35	.00	.00	-.09	- .67	.500

Note: sr^2 (unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

while expressed sexual aggression accounts for only 6%; the remaining 11.6% is shared variance.

Due to the high levels of expressed and received sexual aggression for males in this study, and given the large correlation between them (r = .798), a second backward stepwise regression analysis was conducted. Expressed sexual aggression was regressed on the variables of received sexual aggression and expressed and received physical aggression. Table 13 presents the results of this analysis. The R^2 of .66 is significant ($p < .001$), and 66% of the variance of expressed sexual aggression is predicted. Received sexual aggression uniquely accounts for 47% of the variance, while received physical aggression uniquely accounts for 19% of the variance. Expressed physical aggression did not account for any of the variance, and there was no variance shared between expressed sexual aggression and received sexual and physical aggression.

3.3 Dating Violence and Psychopathy-Related Personality Traits

3.3.1 Second Aim of the Current Study

The second aim of the current study was to examine the relationships between psychopathy-related personality traits and the use of physical and sexual aggression in dating relationships. Hypothesis 3 predicted that, for both males and females, the use of physical aggression would be positively correlated with impulsivity, detachment, venturesomeness, and monotony avoidance, while being negatively correlated with socialization, need for approval, and empathy. Table 14 indicates that, for males, all of the correlations with expressed

Table 13

Multiple Regression for Males of Expressed Sexual Aggression on the Remaining Aggression Scales

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
EXPRESSED SEXUAL AGGRESSION	.81	.66	.66	81.71	.000						
Received Sexual Aggression						.80	.47	.71	.58	10.82	.000
Received Physical Aggression						.43	.19	.16	.18	2.58	.012
Removed											
Expressed Physical Aggression						.36	.00	-.03	-.02	-.23	.816

Note: sr^2(unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

Table 14

Correlations Between Personality Measures and Physical Aggression Variables by Sex

	Males		Females	
	Expressed Phys. Agg.	Received Phys. Ag.	Expressed Phys. Agg.	Received Phys. Ag.
Socialization	-.245 *	-.333 **	-.293 ***	-.249 ***
Eysenck's Impulsivity	.205 *	.258 **	.148 *	.112
Empathy	-.140	-.122	-.154 *	-.122 *
Venture-someness	-.021	-.097	.168 *	.065
Schalling's Impulsivity	.138	.202 *	.115	.098
Detachment	.117	.201 *	-.011	.018
Monotony Avoidance	-.098	.042	.136 *	.054
Need for Approval	-.008	-.054	-.113	-.105

* $p < .05$ ** $p < .01$ *** $p < .001$

physical aggression are in the predicted direction, except that with venturesomeness. However, the only correlations that were significant were those with socialization (r = -.245, p < .05) and Eysenck's impulsiveness (r = .205, p < .05).

Similarly, Table 14 demonstrates that, for females, the correlations between personality traits and the violence variables were in the expected direction, with the exception of Detachment. However, the only correlations that were significant were socialization (r = -.293, p < .001), empathy (r = -.154, p < .05), Eysenck's impulsiveness (r = .148, p < .05), venturesomeness (r = .168, p < .05), and monotony avoidance (r = .136, p < .05). Table 14 also indicates that the correlations between the personality variables and received physical aggression are roughly comparable to those with expressed physical aggression, further limiting the possible significance of the latter.

Backward stepwise multiple regressions were subsequently performed, for males and females separately, to assess the amount of variance in expressed physical aggression accounted for by the combination of personality measures. Table 15 provides the results for these regressions. For both males and females, socialization was the only personality variable which remained in the equation, uniquely predicting expressed physical aggression. For males, socialization accounted for 6% of the variance, while for females, socialization accounted for 9% of the variance of expressed physical aggression.

Hypothesis 4 predicted that the use of sexual aggression against a dating partner would also be related to psychopathy-related personality

Table 15

Multiple Regressions of Expressed Physical Aggression on the Personality Variables for Males and Females

MALES

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
EXPRESSED PHYSICAL AGGRESSION	.24	.06	.05	5.36	.023						
Socialization						-.24	.06	-.22	-.24	-2.31	.023
Variables Removed from the Equation											
Eysenck's Impulsivity						.20	.00	.30	.23	1.00	.322
Schalling's Impulsivity						.14	.00	.03	.03	.75	.457
Empathy						-.14	.00	-.24	-.14	-1.05	.298
Detachment						.12	.00	-.01	-.00	.48	.634
Venturesomeness						-.02	.00	.05	.03	- .18	.858
Monotony Avoidance						-.10	.00	-.22	-.21	-1.27	.208
Need for Approval						-.01	.00	.12	.12	.38	.704

Table continues

Table 15 (continued)

Multiple Regressions of Expressed Physical Aggression on the Personality Variables for Males and Females

FEMALES

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
EXPRESSED PHYSICAL AGGRESSION	.29	.09	.08	17.50	.000						
Socialization						-.29	.09	-.23	-.29	-4.18	.000
Variables Removed from the Equation											
Eysenck's Impulsivity						.14	.00	.05	.05	-.20	.844
Schalling's Impulsivity						.11	.00	-.07	-.08	-.16	.877
Empathy						-.15	.00	-.25	-.13	-1.51	.132
Detachment						-.01	.00	-.10	-.09	-.93	.356
Venturesomeness						.17	.00	.06	.05	.94	.350
Monotony Avoidance						.14	.00	.01	.02	.58	.560
Need for Approval						-.11	.00	-.06	-.06	-.48	.629

Note: sr^2(unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

traits. That is, for both males and females, it was expected that expressed sexual aggression would be positively correlated with impulsivity, detachment, venturesomeness, and monotony avoidance, while being negatively correlated with socialization, need for approval, and empathy. Table 16 indicates that, for males, expressed sexual aggression is positively correlated with detachment (r = .179, p < .05) and inversely correlated with socialization (r = -.312, p < .01), but is not significantly correlated with any of the other personality measures. Received sexual aggression for males was also significantly related to socialization (r = -.230, p < .01). For females, table 16 indicates that there were no statistically significant relationships between the personality variables and expressed or received sexual aggression.

Again, backward stepwise multiple regressions were performed, for males and females separately, to assess the amount of variance in expressed sexual aggression accounted for by the combination of personality measures. Table 17 provides the results of the regressions. For males, socialization is the only variable which remained in the equation, uniquely accounting for 10% of the variance of expressed sexual aggression. For females, none of the personality variables predicted expressed sexual aggression.

3.3.2 Post Hoc Analysis: Aggressors vs. Non-aggressors

The total sample was divided according to the subjects' reported use/non-use of the aggression tactics against their partners. This grouping was to permit examination of differences and similarities, on the personality scales, between the group of subjects who reported using

Table 16

Correlations Between Personality Measures and Sexual Aggression Variables by Sex

	Males		Females	
	Express Sex Ag.	Receive Sex Ag.	Express Sex Ag.	Receive Sex Ag.
Socialization	-.312 **	-.230 *	-.002	-.112
Eysenck's Impulsivity	.053	-.053	-.058	.073
Empathy	-.037	.066	-.060	-.024
Venture-someness	-.080	-.065	.020	.053
Schalling's Impulsivity	-.045	-.071	-.031	.101
Detachment	.179 *	.131	-.053	-.088
Monotony Avoidance	.048	.012	-.047	.016
Need for Approval	-.005	.070	.046	-.115

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 17

Multiple Regressions Expressed Sexual Aggression on the Personality Variables for Males and Females

MALES

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
EXPRESSED SEXUAL AGGRESSION	.31	.10	.09	9.03	.004						
Socialization						-.31	.10	-.38	-.31	-3.01	.004
Variables Removed from the Equation											
Eysenck's Impulsivity						.05	.00	-.07	-.04	-.94	.348
Schalling's Impulsivity						-.05	.00	-.15	-.11	-1.23	.221
Empathy						-.04	.00	.09	.04	.01	.994
Detachment						.10	.00	.17	.11	.93	.355
Venturesomeness						-.08	.00	-.14	-.06	-.75	.456
Monotony Avoidance						.05	.00	.15	.10	.05	.962
Need for Approval						-.01	.00	.08	.06	.54	.589

Table continues

Table 17 (continued)

Multiple Regressions Expressed Sexual Aggression on the Personality Variables for Males and Females

FEMALES

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
EXPRESSED SEXUAL AGGRESSION	.00	.00	.00	undefined							
Variables Removed from the Equation											
Socialization						-.00	.00	-.02	-.04	-.03	.976
Eysenck's Impulsivity						-.06	.00	-.05	-.06	-.80	.427
Schalling's Impulsivity						-.03	.00	.01	.02	-.42	.678
Empathy						-.06	.00	-.08	-.06	-.81	.418
Detachment						-.05	.00	-.05	-.07	-.72	.471
Venturesomeness						.02	.00	.05	.06	.27	.788
Monotony Avoidance						-.05	.00	-.05	-.08	-.64	.527
Need for Approval						.05	.00	.02	.02	-.63	.528

Note: sr^2(unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

physical and/or sexual aggression against their partners (aggressors; n = 126) and the group of subjects who did not use aggressive tactics (non-aggressors; n = 148). The planned analyses did not specifically permit such between-group comparisons. Aggressors were significantly younger (mean age = 23.24, SD = 7.86) than non-aggressors (mean age = 24.96, SD = 5.05; F (1, 272) = 4.48, p < .05). Accordingly, age was employed as a covariate in this analysis. A MANCOVA was performed to assess between-group differences on eight variables: socialization, need for approval, Eysenck's impulsivity, empathy, venturesomeness, Schalling's impulsivity, detachment, and monotony avoidance. These results are presented in Table 18.

The overall F for the MANOVA was statistically significant (p < .05). Aggressors and non-aggressors did not differ with regard to their scores on need for approval, impulsivity, venturesomeness, or monotony avoidance. However, aggressors were less socialized (p < .001), less empathic (p < .05), and more detached (p < .01) than the non-aggressors.

3.4 Supplemental Information

Although 94.7% of the females who reported experiencing physical aggression (expressed and/or received) in their dating relationships completed the supplemental questionnaire, the actual number was quite small (n = 54). Only 52.1% of the males who reported experiencing physical aggression (expressed and/or received) in their dating relationships completed the supplemental questionnaire, supplying an n of 25. Due to the limitations imposed on statistical analyses by the small n, few analyses were conducted.

Table 18

Aggressor/Non-Aggressor Differences on the Personality Scales

Scale		Non-Aggressor (n = 148)	Aggressor (n = 126)	F (1, 271)	p
Socialization	Mean	34.70	32.01		
	SD	6.10	6.46		
	Adjusted Mean	34.80	31.91	14.32	.000
Need for Approval	Mean	14.95	13.98		
	SD	5.10	5.10		
	Adjusted Mean	14.91	14.01	2.08	.151
Eysenck's Impulsivity	Mean	7.87	8.67		
	SD	4.26	4.59		
	Adjusted Mean	7.91	8.62	1.74	.188
Empathy	Mean	13.43	12.71		
	SD	3.03	3.26		
	Adjusted Mean	13.45	12.69	3.97	.047
Venturesomeness	Mean	9.26	9.87		
	SD	3.83	3.66		
	Adjusted Mean	9.26	9.87	1.80	.181
Schalling's Impulsivity					
	Mean	14.13	14.64		
	SD	6.00	5.48		
	Adjusted Mean	14.16	14.60	.39	.534
Detachment	Mean	10.12	11.60		
	SD	4.90	4.94		
	Adjusted Mean	10.06	11.67	7.28	.007
Monotony Avoidance	Mean	16.71	17.37		
	SD	5.93	5.78		
	Adjusted Mean	16.76	17.32	.61	.435

Note. Age was used as a covariate in this MANOVA; the multivariate (Wilk's Lambda) F (8, 264) = 2.42, p = .015.

Table 19 presents the percentages of subjects, by sex, responding to the questions regarding their motives and their perceptions of their partners' motives for using physical aggression in their dating relationships. The three most important motives reported and perceived for both males and females appear to be playfulness, stress due to the relationship, and the emotions of jealousy/anger. Although, in general, subjects seem to ascribe the same motives to their partners as they ascribe to themselves, more males than females attribute their own aggression to playfulness (X^2 (1) = 6.58, $p < .01$). Interestingly, the proportion of women who attribute their use of physical aggression to strengthening their refusal of sexual activity is very low (3.7%), and lower than the proportion of men (12%) attributing their partners' use of aggression to this.

Table 20 provides the percentages of subjects responding to the questions regarding the number of occasions during which they had experienced physical aggression in their relationship. Unfortunately, the wording of the question was such that the meaning of the responses was not clear. For example, subjects may have answered "self-to-partner, **once**", "partner-to-self, **once**", and "equal participants, **once**", which may indicate only one occasion or three separate occasions. Table 18 is, therefore, not completely interpretable. Nevertheless, there is some indication that males were less likely than females to say that (a) there was never an occasion when they had used violence against their partner (16.7% to 42.3%), and (b) their partner had used violence on them on more than three occasions (12.5% to 23.1%).

Table 19

Perceived Motives for Use of Violence by Sex (in %)

Motive	Males (n = 25)		Females (n = 54)	
	Partner to Self	Self to Partner	Partner to Self	Self to Partner
Jealousy, Anger	32	24	44.4	31.5
Being Playful	72	68	44.4	37.0
To cause harm	4	4	9.2	9.3
Self-defense	4	12	5.6	16.7
Strengthen refusal of sexual activity	12	4	0	3.7
Stress due to relationship	40	40	35.2	31.5
Stress not due to relationship	12	4	9.3	5.6
Other	4	8	13.0	1.9

Note. The columns do not total to 100, as subjects may have indicated more than one motive.

Table 20

Number of Occasions of Use of Violence by Males and Females

		Never	Once	2 - 3 times	More than 3 times
MALES (n = 24)					
self to partner	%	16.7	37.5	29.2	16.7
	N	4	9	7	4
partner to self	%	25.0	29.2	33.3	12.5
	N	6	7	8	3
equal participants	%	29.2	25.0	16.7	12.5
	N	7	6	4	3
FEMALES (n = 52)					
self to partner	%	42.3	28.8	19.2	9.6
	N	22	15	10	5
partner to self	%	21.2	32.7	19.2	23.1
	N	11	17	10	12
equal participants	%	51.9	23.1	9.6	15.4
	N	27	12	5	8

Table 21 presents the percentages of subjects responding to the questions regarding their perception of who, if anyone, was the victim of the physical aggression. Interestingly, the female partner was more likely than the male partner to be perceived by both male and female respondents as the victim (X^2 (1) = 19.64, $p < .001$).

3.5 Replication Across Samples

The main analyses were repeated on the data collected from University of Saskatchewan students. It is noteworthy that the return rate for subjects at the University of Saskatchewan (30.9% of 708 questionnaires distributed) was much lower than for subjects at the University of Windsor (70.1% of 572 questionnaires distributed). However, the subject selection process differed between the two universities, as subjects enrolled in psychology classes at the University of Windsor received one or two class credit points (depending on the professor) for participating in the study. The low return rate at the University of Saskatchewan may be reflective of a lack of incentive.

Table 22 shows the rate of experience, in percentages, of each tactic for Saskatchewan and Windsor males and females. Like the Windsor sample, nearly five times as many males than females in the Saskatchewan sample reported using the tactic, "held my partner down". Unlike the Windsor sample, no Saskatchewan males reported using the tactics of "hit with something", "choked", "beat up", or "threatened with a knife or gun," and no males or females in the Saskatchewan reported the receipt of "beat up" or "threatened with a knife/gun."

Table 21

Who was the Victim, Generally?

	Self	Partner	No Answer
Males (n = 24)	6 (25%)	14 (58%)	4 (16.7%)
Females (n = 52)	37 (71.2%)	9 (17.3%)	6 (11.5%)

Table 22

Percentage of Respondents Who Reported Expressing and Receiving Specific Physical and Sexual Aggression Tactics by Sex

Physical Aggression Tactic	U. of Windsor Sample				U. of Saskatchewan Sample			
	Expressed		Received		Expressed		Received	
	Male (n = 86)	Female (n = 188)	Male	Female	Male (n = 55)	Female (n = 118)	Male	Female
Threw something	12.8	17.6	33.7	6.4	3.6	8.4	14.5	6.7
Pushed, grabbed, or shoved	20.9	20.2	43.0	22.9	16.4	16.8	18.2	14.3
Slapped	15.1	13.8	31.4	9.0	3.6	9.2	21.8	5.9
Held down	24.4	5.3	18.6	14.4	18.9	7.6	3.6	8.5
Kicked, bit, or hit with fist	11.6	9.0	31.4	7.4	3.6	7.6	12.7	4.2
Hit (or tried) with something	9.3	10.1	29.1	5.3	0	3.4	12.7	2.5
Choked	8.1	2.7	14.0	4.8	0	.8	0	1.7
Beat up	9.3	3.2	10.5	4.3	0	0	1.8	0
Threatened with a knife/gun	7.0	3.7	14.0	5.9	0	0	0	0
Used a knife/gun	5.8	2.1	11.6	2.1	1.8	1.8	1.8	1.8
Total: One or more of above tactics	40.7	30.9	55.8	30.3	21.8	26.1	30.9	26.1

Table continues

Table 22 (continued)

Percentage of Respondents Who Reported Expressing and Receiving Specific Physical and Sexual Aggression Tactics by Sex

Sexual Aggression Tactic	U. of Windsor Sample				U. of Saskatchewan Sample			
	Expressed		Received		Expressed		Received	
	Male (n = 86)	Female (n = 188)	Male	Female	Male (n = 55)	Female (n = 118)	Male	Female
Necking	30.2	11.7	26.7	24.5	29.1	11.8	25.5	22.7
Breast/Chest fondling	34.9	10.1	22.1	24.5	23.6	6.7	9.1	31.1
Genital fondling	32.6	10.1	26.7	18.6	23.6	6.7	10.9	26.1
Oral sex	22.1	5.3	19.8	18.1	9.1	1.7	5.5	12.6
Attempted intercourse	24.4	8.0	22.1	20.7	12.7	3.2	3.6	20.2
Intercourse without violence	12.8	5.9	12.8	12.2	1.8	0	3.6	11.8
Intercourse with violence	4.7	2.7	7.0	5.3	0	.8	1.8	.8
Total: One or more of above	44.2	19.1	36.0	37.2	41.8	17.6	30.1	40.3

Note. Columns total to more than 100 as subjects may endorse more than one item.

3.5.1 Comparison of Mean Scores on Variables Between Samples

A MANOVA was performed for each sex separately, to examine the differences and similarities between means scores on all variables for the Windsor and Saskatchewan samples. For males, the Saskatchewan group was younger (mean = 22.15, *SD* = 5.42) than the Windsor sample (mean = 24.30, *SD* = 6.40; *F* (1, 139) = 4.28, *p* < .05). Also, for females, the Saskatchewan group was younger (mean = 21.03, *SD* = 3.07) than the Windsor group (mean = 24.11, *SD* = 6.93; *F* (1, 304) = 20.77, *p* < .001). Therefore, age was used as a covariate in both MANCOVAs.

Table 23 presents the results of the MANCOVA for Windsor and Saskatchewan males. The overall *F* was significant (*p* < .05). Although all the means on the personlaity variables looked similar, the Saskatchewan males were more socialized, more venturesome, and more empathic (*p*'s < .05) than their Windsor counterparts. The Saskatchewan and Windsor males did not differ with regard to scores on either impulsivity measure, need for approval, detachment, or monotony avoidance. The means on the violence scales looked considerably different between the two samples: Saskatchewan males reported significantly less expressed physical aggression (*p* < .05), less received physical aggression (*p* < .01), and less received sexual aggression (*p* < .05) than did the Windsor males. There was also a trend for the Saskatchewan males to report less expressed sexual aggression (*p* = .08).

Table 23

Comparison of Windsor and Saskatchewan Males' Mean Scores and Standard Deviations on All Measures

Measure (Potential Range)		Windsor Males (n = 86)	Saskatchewan Males (n = 55)	F (1, 138)	p
Socialization (0 - 54)	M	32.395	34.982		
	SD	6.144	5.053		
	Adj. M	32.53	34.84	5.31	.023
Eysenck's Impulsivity (0 - 19)	M	7.791	7.218		
	SD	4.257	3.828		
	Adj. M	7.92	7.09	1.39	.241
Empathy (0 - 16)	M	11.233	12.582		
	SD	3.314	2.492		
	Adj. M	11.22	12.59	6.69	.011
Venturesomeness (0 - 19)	M	10.663	12.200		
	SD	3.296	2.792		
	Adj. M	10.72	12.13	6.63	.011
Schalling's Impulsivity (0 - 30)	M	13.942	13.782		
	SD	5.487	4.879		
	Adj. M	14.00	13.72	.09	.761
Detachment (0 - 30)	M	12.430	11.164		
	SD	5.038	3.971		
	Adj. M	12.40	11.19	2.20	.141
Monotony Avoidance (0 - 30)	M	16.884	18.109		
	SD	5.281	4.879		
	Adj. M	16.97	18.02	1.37	.244
Need for Approval (0 - 54)	M	13.942	13.709		
	SD	5.277	5.567		
	Adj. M	13.79	13.86	.01	.940

Table continues

Table 23 (continued)

Comparison of Windsor and Saskatchewan Males' Mean Scores and Standard Deviations on All Measures

Measure (Potential Range)		Windsor Males (n = 86)	Saskatchewan Males (n = 55)	F (1, 138)	p
Expressed Physical Aggression (0 - 60)	M	2.59	.84		
	SD	5.60	1.92		
	Adj. M	2.69	.74	6.03	.015
Received Physical Aggression (0 - 60)	M	5.66	1.80		
	SD	8.36	4.24		
	Adj. M	5.75	1.71	10.61	.001
Expressed Sexual Aggression (0 - 42)	M	4.37	2.27		
	SD	7.55	4.83		
	Adj. M	4.35	2.29	3.12	.080
Received Sexual Aggression (0 - 42)	M	3.88	1.42		
	SD	7.86	3.11		
	Adj. M	3.88	1.47	4.32	.040

Note. Age was used as a covariate in this MANOVA; overall (Wilke's Lambda) F (12, 127) = 2.24, p = .013.

Table 24 presents the results of the MANOVA for Windsor and Saskatchewan females. The overall F of the MANOVA was significant ($p < .01$). Compared to Windsor females, Saskatchewan females scored as significantly more socialized ($p < .01$), and less impulsive on both the Eysencks' ($p < .001$) and Schalling's ($p < .01$) measures of impulsivity. There was no significant difference between the groups of females on the measures of empathy, venturesomeness, detachment, social desirability (need for approval), or monotony avoidance. Very unlike the male samples, the means on the violence scales were very similar for the two female samples, with no significant differences between the Windsor and Saskatchewan sample.

3.5.2 Relationship between Physical and Sexual Aggression for Males and Females

As with the Windsor group, a MANOVA was conducted to assess between-group differences on the aggression variables. Regarding the potential control variable of age, males (mean age = 22.15, SD = 5.42) did not differ from females (mean age = 21.03, SD = 3.07; $F(1, 172) = 2.98$, $p = .086$). Again, age was not employed as a covariate despite the significantly younger age of the Saskatchewan sample. Table 25 presents the results of the MANOVA, along with the same results from the Windsor group. Although the overall F was again significant ($p < .001$), and the results of the individual F statistics are the same for expressed physical and sexual aggression, the results of the individual F statistics are different for the received forms of aggression.

Table 24

Comparison of Windsor and Saskatchewan Females' Mean Scores and Standard Deviations on All Measures

Measure (Potential Range)		Windsor Females (n = 188)	Saskatchewan Females (n = 118)	F (1, 303)	p
Socialization (0 - 54)	M	33.952	36.729		
	SD	6.471	6.491		
	Adj. M	34.10	36.58	9.99	.002
Eysenck's Impulsivity (0 - 19)	M	8.441	6.415		
	SD	4.493	4.606		
	Adj. M	8.49	6.37	14.85	.000
Empathy (0 - 16)	M	13.952	14.356		
	SD	2.683	2.744		
	Adj. M	14.00	14.41	.87	.352
Venturesomeness (0 - 19)	M	9.027	9.475		
	SD	3.851	3.236		
	Adj. M	9.08	9.43	.63	.426
Schalling's Impulsivity (0 - 30)	M	14.553	12.364		
	SD	5.880	5.713		
	Adj. M	14.67	12.25	11.72	.001
Detachment (0 - 30)	M	10.059	9.271		
	SD	4.760	4.601		
	Adj. M	9.99	9.34	1.32	.252
Monotony Avoidance (0 - 30)	M	17.069	16.153		
	SD	6.116	5.376		
	Adj. M	17.22	16.00	2.97	.086
Need for Approval (0 - 54)	M	14.755	14.449		
	SD	6.933	5.175		
	Adj. M	14.83	14.37	.54	.462

Table continues

Table 24 (continued)

Comparison of Windsor and Saskatchewan Females' Mean Scores and Standard Deviations on All Measures

Measure (Potential Range)		Windsor Females (n = 188)	Saskatchewan Females (n = 118)	F (12, 292)	p
Expressed Physical Aggression (0 - 60)	M	1.90	1.25		
	SD	5.10	3.47		
	Adj. M	1.95	1.20	1.82	.178
Received Physical Aggression (0 - 60)	M	1.91	1.31		
	SD	5.61	3.48		
	Adj. M	1.93	1.28	1.20	.274
Expressed Sexual Aggression (0 - 42)	M	1.22	.71		
	SD	3.72	2.20		
	Adj. M	1.21	.72	1.59	.209
Received Sexual Aggression (0 - 42)	M	3.52	3.28		
	SD	6.93	6.25		
	Adj. M	3.57	3.23	.18	.673

Note. Age was used as a covariate in this MANOVA; overall (Wilke's Lambda) F (12, 292) = 2.77, p = .001.

Table 25

Means, Standard Deviations, Range, and Percent of Respondents Reporting Physical and Sexual Aggression by Sex

Scale		Saskatchewan Males (n = 55)	Saskatchewan Females (n = 119)	F (1, 172)	p	Windsor Males (n = 86)	Windsor Females (n = 188)	F (1, 272)	p
Expressed Physical Aggression	M	.836	1.254	.67	.415	2.59	1.90	1.03	.312
	SD	1.922	3.467			5.60	5.10		
	Range	0 - 7	0 - 21			0 - 32	0 - 33		
	% of n	21.8	26.1			40.7	30.9		
Received Physical Aggression	M	1.800	1.305	.69	.407	5.66	1.91	19.12	.000
	SD	4.244	3.483			8.36	5.61		
	Range	0 - 25	0 - 18			0 - 36	0 - 41		
	% of n	30.9	26.1			55.8	30.3		
Expressed Sexual Aggression	M	2.273	.712	8.70	.004	4.37	1.22	21.49	.000
	SD	4.832	2.196			7.55	3.72		
	Range	0 - 30	0 - 18			0 - 36	0 - 28		
	% of n	41.8	17.6			44.2	19.1		
Received Sexual Aggression	M	1.418	3.280	4.27	.040	3.88	3.52	.15	.701
	SD	3.107	6.246			7.86	6.93		
	Range	0 - 14	0 - 28			0 - 36	0 - 33		
	% of n	30.1	40.3			36.0	37.2		

Note. For the Saskatchewan sample, multivariate (Wilk's Lambda) F (4, 169) = 5.68, p = .000. The potential range for the expressed and received physical aggression scales is 0 - 60; the potential range for the expressed and received sexual aggression scales is 0 - 42.

Unlike the Windsor sample, the Saskatchewan males reported levels of received physical aggression which were equivalent to (not greater than) the Saskatchewan females. Also, Saskatchewan males reported levels of received sexual aggression which were significantly lower (not equivalent) to Saskatchewan females. Chi-square analysis of the percentages of males and females reporting the experience of expressed and received physical and sexual aggression were conducted to determine whether these between-group differences were significant.

Compared to males in the Saskatchewan sample, more males in the Windsor sample reported using physical aggression against a dating partner (X^2 (1) = 5.38, p = .020), as well as receiving physical aggression from their dating partners (X^2 (1) = 8.37, p = .004). The proportion of females in both samples reporting the use of physical aggression against their partners was roughly equivalent (X^2 (1) = .82, p = .366), as was the proportion reporting the receipt of physical aggression (X^2 = .65, p = .420).

The proportion of males in both samples did not differ in the reporting of expressed sexual aggression (X^2 (1) = .08, p = .782) and received sexual aggression (X^2 (1) = .39, p = .530). As well, the proportion of females in both samples did not differ in reporting expressed sexual aggression (X^2 (1) = .11, p = .742) and received sexual aggression (X^2 (1) = .30, p = .586).

Examination of within-sex differences within the Saskatchewan sample indicated that, similar to the Windsor males, Saskatchewan males reported receiving more physical aggression than they used against a

partner ($t = -2.23$, $p = .030$; see Table 26). Unlike the Windsor males, the Saskatchewan males reported using more sexual aggression against their partners than they received from them ($t = 2.09$, $p = .041$), while the Windsor males had reported equivalent levels of expressed and received sexual aggression.

Within-sex differences for the females in the Saskatchewan sample were consistent with the within-sex differences found for the Windsor females. That is, females in the Saskatchewan sample reported equivalent levels of expressed and received physical aggression ($t = -.24$, $p = .815$), as did the Windsor females. Like the Windsor females, the Saskatchewan females reported significantly higher levels of received sexual aggression than expressed sexual aggression ($t = -4.81$, $p = .000$).

As with the Windsor sample, backward multiple regressions, for males and females separately, were used to assess (a) which combination of violence variables accounted for the most variance in the use of physical aggression by female subjects, and (b) which combinations of violence variables accounted for the most variance in the receipt of physical aggression by male subjects.

Table 27 gives the results of the backward multiple regression of expressed physical aggression for Saskatchewan females. The results for Windsor females are copied below for direct comparisons. While expressed and received sexual aggression accounted for minimal amounts of variance in the Windsor sample, they did not remain in the equation for the Saskatchewan females. For Windsor and Saskatchewan females, the

Table 26

T-Tests of Within-sex Differences in the Reported Experience of Physical and Sexual Aggression by Males and Females in the Windsor and Saskatchewan Samples

	Windsor		Saskatchewan	
	t (df)	p	t (df)	p
MALES n =	88		55	
Expressed & Received Physical Aggression	-4.18 (85)	.000	-2.23 (54)	.030
Expressed & Received Sexual Aggression	.92 (85)	.359	2.09 (54)	.041
FEMALES n =	188		118	
Expressed & Received Physical Aggression	-.04 (187)	.968	-.24 (117)	.815
Expressed & Received Sexual Aggression	-5.18 (187)	.000	-4.81 (117)	.000

Table 27

Between-Sample Comparison of Multiple Regression for Females of Expressed Physical Aggression on Remaining Aggression Scales

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
Saskatchewan											
EXPRESSED PHYSICAL AGGRESSION	.77	.60	.59	172.30	.000						
Received Physical Aggression						.77	.59	.77	.77	13.13	.000
Variables Removed											
Expressed Sexual Aggression						-.07	.00	-.01	-.01	-.23	.819
Received Sexual Aggression						.22	.00	-.01	-.02	-.36	.719
Windsor											
EXPRESSED PHYSICAL AGGRESSION	.80	.64	.64	110.40	.000						
Received Physical Aggression						.78	.50	.71	.78	16.14	.000
Expressed Sexual Aggression						.35	.04	.31	.23	4.52	.000
Received Sexual Aggression						.28	.01	-.10	-.14	-2.67	.008

Note: sr^2 (unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

best predictor of expressed physical aggression was received physical aggression, accounting (uniquely) for 50% and 59%, respectively, of the variance of expressed physical aggression (*p*'s < .001).

Table 28 presents the results of the backward multiple regression of received physical aggression for Saskatchewan males, with the results for Windsor males copied below for direct comparisons. The results for the two samples are very similar, with received sexual aggression being removed from both equations. Expressed physical and sexual aggression uniquely account for similar amounts of variance in the Saskatchewan sample (26% and 12%, respectively) and in the Windsor sample (21% and 6%, respectively). However, the two variables, combined, account for substantially more variance in received physical aggression in the Saskatchewan sample (R^2 = 71) than in the Windsor sample (R^2 = .40). Thus, shared variance contributes 33% for Saskatchewan but only 13% for Windsor.

Table 29 presents the results of the backward multiple regression of expressed sexual aggression for Saskatchewan males, with the results for Windsor males copied below for direct comparisons. The results for the two samples are similar, but expressed physical aggression was not removed from the Saskatchewan equation. In the Saskatchewan sample, received sexual aggression uniquely accounts for 25% of the variance, while received physical aggression uniquely accounts for 11%, and expressed physical aggression accounts for 3%. The total unique variance accounted for is 39%, while the shared variance accounted for by the three variables is 36%, unlike the Windsor sample, wherein there

Table 28

Between-Sample Comparison of Multiple Regression for Males of Received Physical Aggression on the Remaining Aggression Scales

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
Saskatchewan Sample											
RECEIVED PHYSICAL AGGRESSION	.85	.71	.70	65.19	.000						
Expressed Physical Aggression						.70	.26	1.19	.54	6.89	.000
Expressed Sexual Aggression						.67	.12	.44	.50	6.37	.000
---------- Removed ----------											
Received Sexual Aggression						.53	.00	-.15	-.11	-.88	.381
Windsor Sample											
RECEIVED PHYSICAL AGGRESSION	.63	.40	.39	27.71	.000						
Expressed Physical Aggression						.59	.21	.75	.50	5.42	.000
Expressed Sexual Aggression						.43	.06	.36	.33	2.80	.006
---------- Removed ----------											
Received Sexual Aggression						.35	.00	.00	-.09	- .67	.508

Note: sr^2(unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

Table 29

Between-Sample Comparison of Multiple Regressions for Males of Expressed Sexual Aggression on the Remaining Aggression Scales

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
Saskatchewan											
EXPRESSED SEXUAL AGGRESSION	.86	.75	.73	50.81	.000						
Received Sexual Aggression						.79	.25	.92	.59	7.87	.000
Received Physical Aggression						.67	.11	.60	.53	4.74	.000
Expressed Physical Aggression						.33	.03	-.58	-.23	-2.32	.024
Windsor											
EXPRESSED SEXUAL AGGRESSION	.81	.66	.66	81.71	.000						
Received Sexual Aggression						.80	.47	.71	.58	10.82	.000
Received Physical Aggression						.43	.19	.16	.18	2.58	.012
Removed											
Expressed Physical Aggression						.36	.00	-.03	-.02	- .23	.816

Note: sr^2(unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

was no variance shared between expressed sexual aggression and received sexual and physical aggression.

3.5.3 Relationships between Use of Aggression and Personality Variables

Hypothesis 3 predicted that the use of physical aggression would be related to psychopathy-related personality variables for both males and females. As with the Windsor sample, backward multiple regressions, for females and males separately, were used to assess the amount of variance in expressed physical aggression accounted for by the personality measures.

Table 30 presents the results of the backward multiple regressions of expressed physical aggression on the personality variables for females, with the results for the Windsor sample copied below, for direct comparison. For Saskatchewan females, socialization was the only variable remaining in the equation, as it was in the equation for the Windsor females. Socialization accounted for 6% of the variance of expressed physical aggression for Saskatchewan females ($p < .01$), compared to 9% for Windsor females.

Table 31 presents the results of the backward multiple regressions of expressed physical aggression on the personality variables for males, with the results for the Windsor sample copied below, for direct comparison. For Saskatchewan males, no variables remained in the equation, unlike the Windsor males, where socialization again remained, accounting for 6% of the variance.

Table 38

Between-Sample Comparison of Multiple Regressions for Females of Expressed Physical Aggression on the Personality Variables

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
Saskatchewan											
EXPRESSED PHYSICAL AGGRESSION	.25	.06	.05	7.62	.007						
Socialization						-.25	.06	-.13	-.25	-2.76	.007
Removed											
Eysenck's Impulsivity						.18	.00	.06	.00	.79	.434
Schalling's Impulsivity						.12	.00	.02	.04	.23	.814
Empathy						-.13	.00	-.10	-.00	-.00	.426
Detachment						.00	.00	.02	.03	.35	.729
Venturesomeness						-.02	.00	-.09	-.00	-.06	.394
Monotony Avoidance						.05	.00	-.01	-.01	-.09	.926
Need for Approval						-.20	.00	-.10	-.15	-1.58	.117
Windsor											
EXPRESSED PHYSICAL AGGRESSION	.29	.09	.08	17.58	.000						
Socialization						-.29	.09	-.23	-.29	-4.18	.000
Removed											
Eysenck's Impulsivity						.14	.00	.05	.05	-.20	.844
Schalling's Impulsivity						.11	.00	-.07	-.00	-.16	.877
Empathy						-.15	.00	-.25	-.13	-1.51	.132
Detachment						-.01	.00	-.10	-.09	-.93	.356
Venturesomeness						.17	.00	.06	.05	.94	.350
Monotony Avoidance						.14	.00	.01	.02	.58	.560
Need for Approval						-.11	.00	-.06	-.06	-.48	.629

Note: sr^2(unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

Table 31

Between-Sample Comparison of Multiple Regressions for Males of Expressed Physical Aggression on the Personality Variables

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
Saskatchewan											
EXPRESSED PHYSICAL AGGRESSION	.00	.00	.00	undefined							
Removed											
Socialization						-.16	.00	-.06	-.16	-1.16	.253
Eysenck's Impulsivity						-.02	.00	-.07	-.15	-.91	.366
Schalling's Impulsivity						.05	.00	.00	.20	-.12	.907
Empathy						.09	.00	.05	.06	.58	.564
Detachment						-.06	.00	-.02	-.03	-.12	.903
Venturesomeness						.01	.00	.07	.10	.00	.998
Monotony Avoidance						-.09	.00	-.05	-.13	-1.24	.223
Need for Approval						-.15	.00	-.04	-.13	-.75	.457
Windsor											
EXPRESSED PHYSICAL AGGRESSION	.24	.06	.05	5.36	.023						
Socialization						-.24	.06	-.22	-.24	-2.31	.023
Removed											
Eysenck's Impulsivity						.20	.00	.30	.23	1.00	.322
Schalling's Impulsivity						.14	.00	.03	.03	.75	.457
Empathy						-.14	.00	-.24	-.14	-1.05	.298
Detachment						.12	.00	-.01	-.00	.48	.634
Venturesomeness						-.02	.00	.05	.03	- .18	.858
Monotony Avoidance						-.10	.00	-.22	-.21	-1.27	.208
Need for Approval						-.01	.00	.12	.12	.38	.704

Note: sr^2 (unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

Hypothesis 4 predicted that the use of sexual aggression would be associated with psychopathy-related personality variables for both males and females. As with the Windsor sample, expressed sexual aggression was regressed on the personality variables for females and males separately. Table 32 presents the results of the regression for Saskatchewan females, with the Windsor results copied below for direct comparison. For Saskatchewan females, venturesomeness and socialization remained in the equation, together accounting for 6% of the variance in expressed sexual aggression ($p < .05$), while, for the Windsor females, no personality variables remained in the equation.

Table 33 presents the results of the regression of expressed sexual aggression on the personality measures for Saskatchewan males, with the Windsor results copied below. For Saskatchewan males, only venturesomeness remained in the equation, accounting for 10% of the variance of expressed sexual aggression, while for Windsor males, only socialization remained in the equation, accounting again for 10% of the variance.

3.5.4 Aggressors' vs. Non-aggressors' Scores on Personality Measures

The total Saskatchewan sample was also divided into groups according to the reported use/non-use of aggression (physical and/or sexual) and a MANOVA was conducted to determine possible between-group differences on the personality variables. Although the groups did not differ in age (F (1, 171) = .02, p = .886), age was used as a covariate to make the results comparable to the Windsor sample. Table 34 presents

Table 32

Between-Sample Comparison Table of Multiple Regressions for Females of Expressed Sexual Aggression on the Personality Variables

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
Saskatchewan											
EXPRESSED SEXUAL AGGRESSION	.23	.06	.04	3.26	.042						
Socialization						-.18	.05	-.08	-.22	-2.36	.020
Venturesomeness						-.09	.02	-.10	-.15	-1.62	.109
Removed											
Eysenck's Impulsivity						.07	.00	.00	.17	1.08	.284
Schalling's Impulsivity						-.04	.00	-.03	-.07	-.66	.509
Empathy						-.01	.00	.04	.05	.51	.611
Detachment						-.02	.00	-.03	-.06	-.69	.495
Monotony Avoidance						-.07	.00	-.04	-.09	-.72	.473
Need for Approval						-.00	.00	.01	.02	.17	.868
Windsor											
EXPRESSED SEXUAL AGGRESSION	.00	.00	.00	undefined							
Removed											
Socialization						-.00	.00	-.02	-.04	-.03	.976
Eysenck's Impulsivity						-.06	.00	-.05	-.06	-.80	.427
Schalling's Impulsivity						-.03	.00	.01	.02	-.42	.678
Empathy						-.06	.00	-.00	-.06	-.81	.418
Detachment						-.05	.00	-.05	-.07	-.72	.471
Venturesomeness						.02	.00	.05	.06	.27	.788
Monotony Avoidance						-.05	.00	-.05	-.08	-.64	.527
Need for Approval						.05	.00	.02	.02	-.63	.528

Note: sr^2(unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

Table 33

Between-Sample Comparison of Multiple Regressions for Males of Expressed Sexual Aggression on the Personality Variables

VARIABLE	R	R^2	Adj. R^2	F	p	r (simple)	sr^2 (unique)	B	β	t	p
Saskatchewan											
EXPRESSED SEXUAL AGGRESSION	.32	.10	.09	6.10	.017						
Venturesomeness						-.32	.10	-.56	-.32	-2.47	.017
Variables Removed from the Equation											
Socialization						-.12	.00	-.11	-.12	-.77	.447
Eysenck's Impulsivity						-.09	.00	-.09	-.07	-.28	.778
Schalling's Impulsivity						-.16	.00	-.11	-.11	-.72	.477
Empathy						-.02	.00	-.40	-.20	-1.46	.151
Detachment						-.07	.00	-.25	-.21	-1.57	.123
Monotony Avoidance						-.29	.00	-.22	-.22	-1.55	.128
Social Desirability						-.20	.00	-.16	-.18	-1.41	.164
Windsor											
EXPRESSED SEXUAL AGGRESSION	.31	.10	.09	9.83	.004						
Socialization						-.31	.10	-.38	-.31	-3.01	.004
Removed											
Eysenck's Impulsivity						.05	.00	-.07	-.04	-.94	.348
Schalling's Impulsivity						-.05	.00	-.15	-.11	-1.23	.221
Empathy						-.04	.00	.09	.04	.01	.994
Detachment						.18	.00	.17	.11	.93	.355
Venturesomeness						-.08	.00	-.14	-.06	-.75	.456
Monotony Avoidance						.05	.00	.15	.10	.05	.962
Need for Approval						-.01	.00	.00	.06	.54	.589

Note: sr^2(unique) represents the semi-partial correlation squared, or the unique contribution of the IV to the variance of the DV, omitting any variance shared with other IV's. r (simple) represents the correlation of the IV with the DV.

the results of the MANCOVA, with the Windsor results for comparison. The overall F was significant ($p < .01$). Like the Windsor sample, the Saskatchewan aggressor and non-aggressor groups did not differ in their scores on venturesomeness, monotony avoidance, or Schalling's measure of impulsivity, while the two groups in the Saskatchewan sample did differ in their scores on socialization ($p < .001$), and empathy ($p < .05$). Unlike the Windsor sample, the Saskatchewan aggressor and non-aggressor groups did not differ in their scores on detachment, while they did differ in their scores on need for approval ($p < .05$), and Eysenck's impulsivity measure ($p < .05$).

3.5.5 Supplemental Information

Table 35 presents the percentages of subjects responding to the questions regarding their motives and their perceptions of their partners' motives for using physical aggression in their dating relationships for the two samples. Although the n's are very small, the three most important motives, in both samples, appear to be playfulness, stress due to the relationship, and the emotions of jealousy/anger. Saskatchewan subjects also seem to ascribe the same motives to their partners as themselves, but Saskatchewan males, unlike Windsor males, clearly are not more likely than females to attribute aggression to playfulness. A greater portion of Saskatchewan females (20%) than Windsor females (3.7%) attributed their use of physical aggression to strengthening their refusal of sexual activity, while the proportion of Saskatchewan males (9.1%) was comparable to that of Windsor males (12%)

Table 35

Between-Groups Comparison of Perceived Motives for Use of Violence by Sex (in %)

Motive	Saskatchewan Sample				Windsor Sample			
	Males (n = 11)		Females (n = 25)		Males (n = 24)		Females (n = 52)	
	Partner to Self	Self to Partner	Partner to Self	Self to Partner	Partner to Self	Self to Partner	Partner to Self	Self to Partner
Jealousy, Anger	27.3	36.4	20	20	32	24	44.4	31.5
Being Playful	45.5	36.4	48	48	72	68	44.4	37.0
To cause harm	0	0	0	4	4	4	9.2	9.3
Self-defense	9.1	9.1	12	12	4	12	5.6	16.7
Strengthen refusal of sexual activity	9.1	0	12	20	12	4	0	3.7
Stress due to relationship	45.5	36.4	16	24	40	40	35.2	31.5
Stress not due to relationship	18.2	9.1	12	4	12	4	9.3	5.6
Other	9.1	9.1	12	4	4	8	13.0	1.9

Note. The columns do not total to 100, as subjects may have indicated more than one motive.

who attributed their partners' use of physical aggression to strengthening (her) refusal of sexual activity.

Table 36 provides the Saskatchewan respondents' answers to the questions regarding the number of occasions during which they had experienced physical aggression in their relationship, with the Windsor sample results copied as well. Like the Windsor sample, Saskatchewan males were less likely than females to say that there was never an occasion when they had used violence against their partner (16.7% to 48%). Unlike the Windsor sample (12.5% to 23.1%), Saskatchewan males were more likely than Saskatchewan females to say their partner had been aggressive towards them on more than three occasions (36.4% to 16.0%).

Table 37 presents the percentages of the Saskatchewan sample responding to the questions regarding their perception of who, if anyone, was the victim of the physical aggression, with the Windsor results copied below. Unlike the Windsor sample, where the female partner tended to be perceived by both males and females to be the victim, in the Saskatchewan sample, both males and females perceived themselves as the victim.

Table 36

Number of Occasions of Use of Violence by Males and Females in the Saskatchewan and Windsor Samples

		Saskatchewan Sample				Windsor Sample			
		Never	Once	2 - 3 times	More than 3 times	Never	Once	2 - 3 times	More than 3 times
MALES (n = 11)						MALES (n = 24)			
self to partner	%	16.7	45.5	18.2	9.1	16.7	37.5	29.2	16.7
	n	3	5	2	1	4	9	7	4
partner to self	%	18.2	18.2	27.3	36.4	25.0	29.2	33.3	12.5
	n	2	2	3	4	6	7	8	3
equal participants	%	54.5	27.3	9.1	9.1	29.2	25.0	16.7	12.5
	n	6	3	1	1	7	6	4	3
FEMALES (n = 23)						FEMALES (n = 52)			
self to partner	%	48.0	24.0	12.0	8.0	42.3	28.8	19.2	9.6
	n	12	6	3	2	22	15	10	5
partner to self	%	24.0	28.0	24.0	16.0	21.2	32.7	19.2	23.1
	n	6	7	6	4	11	17	10	12
equal participants	%	60.0	12.0	12.0	12.0	51.9	23.1	9.6	15.4
	n	15	3	3	3	27	12	5	8

Table 37

Between-Groups Comparison of Subjects' Responses to "Who was the Victim, Generally?"

	Self	Partner	No Answer
SASKATCHEWAN			
Males (n = 11)	7 (6.4%)	3 (2.7%)	1 (9.1%)
Females (n = 25)	17 (68%)	6 (24%)	2 (8%)
WINDSOR			
Males (n = 24)	6 (25%)	14 (58%)	4 (16.7%)
Females (n = 52)	37 (71.2%)	9 (17.3%)	6 (11.5%)

4.0 DISCUSSION

The support or non-support of the hypotheses as stated in the introduction of this paper is first discussed. This discussion is followed by a section discussing the comparability of the data in the current study with that of previous studies in the literature, as well as between the two samples. Next is a brief discussion of the limitations of the current study and implications for future research, with a final section devoted to concluding comments.

4.1 Support for Hypotheses

4.1.1 First Aim of the Current Study: Relationship Between Physical and Sexual Aggression

The first hypothesis, regarding the relationship between expressed physical and received sexual aggression for women, received virtually no support from the results of this study. In the Windsor sample, the experience of unwanted sexual advances accounted for a very small, though significant, unique portion of the variance in the use of physical aggression (1%), but receiving physical aggression accounted for much more (50%), while expressing sexual aggression accounted for 4%. Shared variance among the three variables accounted for a further 9% of the variance.

In the Saskatchewan sample, the women's reported receipt of sexual aggression did not account for any significant unique amount of the variance regarding their use of physical aggression, nor did expressed

sexual aggression. The receipt of physical aggression alone accounted for 59%.

Thus, it appears that the variance in expressed physical aggression by females in dating relationships is consistently predicted by the receipt of physical, not sexual, aggression across these two samples. This seems to depict dating relationships in which both partners are physically aggressive, both partners are physically and sexually aggressive, or both partners are not physically aggressive, rather than dating relationships in which the male partner is sexually aggressive and the female partner is physically self-defensive.

The second hypothesis, regarding the relationship between received physical and expressed sexual aggression for men, received limited support from the results of this study. For the Windsor sample, the men's use of sexual aggression against their partners predicted a significant, small, unique portion of the variance in their received physical aggression scores (6%); while the use of physical aggression predicted over three times as much variance (21%) and received sexual aggression accounted for none (0%). Shared variance between the two uniquely-related variables accounted for a further 13% of the variance.

For men in the Saskatchewan sample, the use of sexual aggression against their partners also significantly accounted for a unique portion of the variance of their receipt of physical aggression tactics (12%), with the use of physical aggression significantly accounting for twice as much unique variance (26%), while received sexual aggression again accounted for none (0%). Shared variance for the two unique-related

variables accounted for more variance (33%) than either variable on its own.

Thus, it appears from the results of this study that, for males, the most important predictors of received physical aggression in dating relationships are expressed physical aggression and a combination of expressed physical and sexual aggression. Expressed sexual aggression is also a significant unique predictor but accounts for less variance in received physical aggression. Putting the results for the first two hypotheses together, it seems that, for both females and males, physical aggression is largely a shared activity, being received where it is expressed and vice-versa. The difference between males and females seems to be that men are much more likely to report that their expressed sexual aggression is also related to this shared activity.

Since the Windsor males had reported high levels of expressed and received sexual aggression, and their scores on these variables were highly correlated, the predictors of expressed sexual aggression were also examined. For Windsor males, received sexual aggression uniquely accounted for 47% of the variance while received physical aggression uniquely accounted for 19% and expressed physical aggression accounted for none (0%). There was no significant shared variance between the two uniquely-related variables. Although the Saskatchewan males reported lower levels of expressed and received sexual aggression, their scores on these variables were equally highly correlated. Unique predictors of expressed sexual aggression for the Saskatchewan males were received sexual aggression (25%), and received physical aggression (11%), but

expressed physical aggression also accounted for a unique amount of the variance (3%). The shared variance among these three variables, however, was the most important predictor (37%) of expressed sexual aggression.

The analysis of expressed sexual aggression in Saskatchewan males as opposed to that of Windsor males seems to better illustrate the possibility that the difference between males and females in reporting on their experience of physical aggression in dating relationships is that, for males, physical aggression is more clearly intertwined with their experience of sexual aggression than for females. It may well be that the same situations or events which females perceive as purely physically aggressive, males perceive as having both physical and sexual aspects.

The participants' responses to the supplemental questionnaire support these conclusions, as well. That is, only a very few women in the Windsor sample reported their use of physical aggression to be an attempt to strengthen their refusal of sexual activity (3.7%), while 12% of the Windsor men reported their partners' use of physical aggression as serving that purpose. However, 16.7% of Windsor females reported their use of physical aggression to be self-defensive, and only 4% of the Windsor males reported their partners' motive for the use of physical aggression to be self-defense. The male respondents seem to be reporting a mixture of physical and sexual activity, while the female respondents are not.

It appears that, in the current study, women's use of physical aggression is more strongly related to their partners' use of physical, rather than sexual, aggression. The women report their use of physically aggressive tactics as due to playfulness, stress, and/or the emotions of jealousy/anger, rather than as strengthening their refusal of sexual activity. However, a relatively high percentage of Windsor and Saskatchewan women report receiving unwanted sexual advances (37.2% and 40.3%, respectively), and it seems that these women are not responding to those advances with physically aggressive tactics. Byers and Lewis (1988) asserted that, while men are expected to take the initiative sexually, women are responsible for exerting negative control. The women in the current study may be exerting that control verbally, they may be simply leaving the situation, or they may be allowing the unwanted advances to continue. It is apparent that they respond to physical aggression with physical aggression; perhaps they feel less sanctioned to respond to sexual aggression in the same way.

On the other hand, the men in the current study are reporting that their partners do (somewhat) rebuff their sexually aggressive behaviours with physically aggressive tactics (with or without verbal accompaniment). However, the relationship between expressed sexual and received physical aggression for men may reflect an alternate explanation, a different set of social expectations. That is, perhaps the men, who are socially sanctioned to not be physically aggressive against women, are responding to their partners' use of physical aggression tactics with sexual, rather than physical, aggression.

4.1.2 Second Aim of the Current Study: Relationship Between Psychopathy-Related Personality Traits and Subjects' Use of Physical and Sexual Aggression

The third hypothesis, that the use of physical aggression by males and females would be related to a pattern of responding on psychopathy-related personality variables, received very little support. Hypothesis three predicted that the use of physical aggression would be positively correlated with narrowly-defined impulsivity (from both Eysenck's I-7 and Schalling's IMD), venturesomeness, monotony avoidance, and detachment, and would be inversely correlated with empathy, socialization, and need for approval. For Windsor men, although two of the correlations were found to be significant (socialization and I-7 impulsivity), the actual magnitude of the correlations was low (r's < .25). For males, only socialization significantly predicted the use of physical aggression in the Windsor sample, accounting for 6% of the variance, while in the Saskatchewan sample, none of the personality traits were significantly predictive of males' use of physical aggression. This lack of supporting evidence in the second sample further weakens the very limited support for the hypothesis provided by the Windsor sample.

For Windsor females, the use of physical aggression was significantly correlated in the predicted direction with socialization, impulsivity (I-7), venturesomeness, monotony avoidance, and empathy, though the actual magnitude of the correlations was again low (r's < .29). Subsequently, socialization was the only personality trait which

significantly predicted the use of physical aggression, accounting for 9% of the variance in the Windsor sample, and similarly accounting for 6% of the variance in the Saskatchewan sample. Thus, limited support for hypothesis three was found for the women in the study, while virtually no support for the hypothesis was found for the men in the study.

The fourth hypothesis was identical to the third hypothesis except that the use of sexual, rather than physical, aggression was the focus. It also received very little support. For males in the Windsor sample, the use of sexual aggression was related to socialization and detachment, as expected, though again, the magnitude of the correlations was low (r's <.31). Subsequently, socialization was the only variable which significantly predicted the use of sexual aggression for both Windsor males (10%) and Saskatchewan males (10%).

For Windsor females, the use of sexual aggression was not significantly correlated with any of the personality variables. Subsequently, none of the personality traits significantly predicted the Windsor females' use of sexual aggression, while for the Saskatchewan females, venturesomeness (2%) and socialization (5%) combined to predict significantly the use of sexual aggression (6%). Thus, limited support for hypothesis four was found for the men in the study, while virtually no support for the hypothesis was found for women in the study.

When the use of physical and sexual aggression were combined, and men and women were combined to form aggressive and non-aggressive groups, the post-hoc analysis revealed significant between-group

differences for both the Saskatchewan and Windsor samples. These differences indicated that aggressors were less socialized and less empathic than their non-aggressive peers.

Putting the results for the last two hypotheses together, it seems that, of all the personality measures, the socialization scale is the best predictor of the use of physical aggression by women and sexual aggression by men. Sex-role socialization for women includes being generally empathic and non-aggressive, which might explain why low scores on the Socialization scale would be predictive of the use of physical aggression by women, whereas for men, sex-role socialization includes being assertive/aggressive and detached, which might explain why low Socialization scores are not consistently or significantly predictive of the use of physical aggression by men. That similar low scores were predictive of sexual aggression by men may indicate that these men are exceeding their socially prescribed role of initiating sexual activity by exceeding the limits set by their partners.

It is important to remember that, although Socialization scores were significant predictors of the use of aggression, the actual amount of variance predicted was generally small, and the clinical usefulness of the information is not clear. That is, not everyone scoring low on the Socialization scale will be aggressive in their dating relationships, and not everyone who uses physically and/or sexually aggressive tactics in their dating relationships will score low on the Socialization scale.

Clearly, the use of physical and sexual aggression by males and females in dating relationships is not related to psychopathy, even though it does appear to be related to some of the psychopathy-related personality traits. Psychopathy itself is a syndrome or combination of extreme levels of the traits being measured in the current study. The majority of individual in the current sample are fairly typical of college student populations as measured by the personality questionnaires. Even though the Socialization scale has been found to differentiate between psychopathic and non-psychopathic criminals, the mean scores on the So scale within those populations were much lower than those of the aggressors in the current sample groups. As well, mean So scores reported by Widom (1978; Widom & Newman, 1985) in her studies of social psychopaths were lower than those found in the current study.

Although social psychopathy as a construct does not appear from the current results to be particularly applicable to the use of aggressive tactics in dating relationships, the relationship between socialization and dating violence may warrant further investigation. The So scale was designed to assess thoughts and behaviours which are considered to be in accord with cultural mores. The So scale has been found to be valid over a number of sample groups, indicating the "degree of social maturity, integrity, and rectitude attained by the individual" (Gough, 1969, p. 10). Although the groups in the current study are within the normative range established for college students, within the group of college students, those who use aggressive tactics score lower

than those who don't, indicating some degree of differential socialization.

4.2 Comparability of Current Data

4.2.1 Comparability Across Studies

Comparisons across studies of dating violence are typically made on the basis of the percentage of respondents who report experiencing at least one act of physical aggression. The percentages of women in the Windsor and Saskatchewan samples reporting using and receiving physical aggression in dating relationships is comparable to that reported in the literature (e.g., Arias et al., 1987; Pedersen & Thomas, in press), as are the percentages of Saskatchewan men. The percentage of Windsor males reporting expressed and received physical aggression tactics are generally higher.

The scale used to measure levels of expressed and received sexual aggression is fairly new, and the one study in the literature using the scale presented percentages based on each subject's reporting on up to four dating relationships (Stets & Pirog-Good, 1989). Therefore, the percentages of men and women reporting the use and receipt of sexual aggression in the current study are not directly comparable. However, the relationship between the use and receipt of sexual aggression for males and females separately may be compared. The Windsor and Saskatchewan women report receiving more sexual aggression than they use, while Saskatchewan men report using more sexual aggression than they receive, and these findings are similar to other reports in the literature (e.g., Burke et al., 1988; Stets & Pirog-Good, 1989).

However, the Windsor men report using and receiving equivalent amounts of sexual aggression, and this is an anomaly. The reason for this relationship for the Windsor men is not clear, and further brings into question the rest of their data. However, the correlations between the use and receipt of sexual aggression for men in both samples were equally strong (*r*'s > .78), and the relationship between the use of sexual aggression and the violence and personality variables were similar.

4.2.2 Comparability of the Windsor and Saskatchewan Samples

Although attempts were made to access as many faculties as possible to get a representative sample of the student population at each university, the subjects in the two sample groups utilized in the current study are not truly representative of the total population of each university. Not all departments were sampled, and the majority of subjects at both schools were recruited from psychology classes. Further, students in the psychology classes at the University of Windsor received two course credit points for participating in the study. Subsequently, the return rate at the University of Windsor was 70.1% while the return rate at the University of Saskatchewan was only 30.9%.

The percentages of Windsor and Saskatchewan women reporting the use and receipt of physical aggression are roughly equivalent. However, the percentages of Windsor men reporting using (40.7%) and receiving (55.8%) physical aggression are higher than those reported in other studies and also higher than the percentages of Saskatchewan males (21.8% and 30.9%, respectively). Examination of the percentages for

individual tactics of the Violence scale indicated that, compared to Saskatchewan males, at least three times as many Windsor males reported using each of the tactics except the two most commonly used ("pushed grabbed, or shoved", and "held down"). Only one of the Saskatchewan males reported using any of the five most severe tactics while all of these tactics were reported as being used by at least five of the Windsor males.

A similar but more extreme pattern was seen comparing the percentages of Windsor and Saskatchewan males reporting receiving each tactic. At least twice as many Windsor males reported receiving each tactic (including being "pushed, grabbed, or shoved": 43% Windsor males, 18.2% Saskatchewan males; and being "held down": 18.6% Windsor males, 3.6% Saskatchewan males). With regard to the five most severe tactics, the maximum possible total of Saskatchewan males reporting at least one experience was nine ("hit with something": 7, "beat up": 1, and "used a knife or gun": 1), while the maximum possible total for Windsor males was 68 (including nine being "beaten up", 10 having a "knife or gun used on them", to 25 being "hit with something").

The percentages of Windsor and Saskatchewan women reporting using (19.1% and 17.6%, respectively) and receiving (37.2% and 40.3%, respectively) sexual aggression were again roughly equivalent. Also, roughly equivalent percentages of Windsor and Saskatchewan men report using (44.2% and 41.8%, respectively) and receiving (36.0% and 30.1%, respectively) sexual aggression. However, examination of the percentages of Windsor and Saskatchewan men reporting receipt of the

individual tactics revealed that, compared to the Saskatchewan males, more than twice as many Windsor men reported receiving chest fondling and genital fondling. For the more severe tactics, compared to Saskatchewan, nearly four times as many Windsor men report receiving oral sex, attempted intercourse, intercourse without violence and intercourse with violence.

The differences between the Windsor and Saskatchewan males in the reported experience of physical and sexual aggression are difficult to explain. Self-selection may have been operating more strongly in the Saskatchewan sample to screen out potentially high scorers from that population, while a larger percentage of Windsor males were induced to participate to earn the course credit points. Its also possible that people living in Windsor are generally more violent due to their close proximity to Detroit, a "violent" American city. The Windsor males may also have been hurrying through the questionnaire in order to get their two bonus points, and may have made mistakes. As well, they may not have taken the questionnaire seriously, and fabricated some of their responses. Scores on the social desirability scale were not related to responses on the aggression scales for men or women from either sample, and the data was analyzed as presented.

4.3 Limitations of the Current Study/Implications for Future Research

4.3.1 Use of a Replication Sample

As other studies in the literature have reported results on the basis of single samples, the current study utilized a replication sample to cross-validate the results. As indicated in the introduction,

results from studies looking at correlates of physical aggression have been inconsistent across studies. Using a replication sample has been worthwhile in providing support for research findings within a single study, and for examining some of the anomalies between samples. For instance, in the current study, the data collection procedures were not entirely consistent for both samples, which likely affected the return rate. As discussed above, the reporting of the Windsor males may have been affected by their incentive to participate to earn credit points. This procedural difference between samples was based on a factor external to the study (a decision by Windsor faculty), and it may serve to underscore the importance of protecting the comparability of data from different samples through rigid adherence to the presented data collection procedure.

4.3.2 Aggression Scales

A shortcoming of the use of the violence scale of the CTS-R in assessing levels of violence in dating relationships is the lack of clear definition of what mean scores are indicating. For instance, a mean score of three on the expressed physical aggression scale may mean 3 - 5 instances of a single tactic, or one instance of each of three tactics, or two instances of one tactic and one instance of another; a mean score of 3.6 on a single tactic becomes more complex, indicating a position between the categories of 3 - 5 times and 6 - 10 times. Even though conventionally, scores are collapsed across categories and tactics in order to produce the total scores, some interpretability of scores is thereby lost. Straus (1979) suggested that item scores could

be weighted so that the use of more severe tactics would increase the total score by the weighted factor, but this would not remedy the problem of combining across frequency categories. The CTS violence scale, while informing us that there is, in fact, physical aggression occurring in a large percentage of dating relationships, may be contributing to the difficulty of attaining a clearer understanding of the dynamics of that aggression.

A further criticism of the CTS Violence scale, one commonly noted in the literature, is that it does not address the circumstances under which the violence occurs. That is, men are generally larger (taller and heavier) than their dating partners, and an intentional punch from the man will generally have more impact than one from the woman; at the same time, a smaller woman will generally be less able to absorb the impact of a punch without injury. As neither the intention nor the outcome are assessed by the CTS, these variations are lost. As well, the use of the term "violence" implies hostility. While there likely is some hostility and intention to harm associated with the use of aggression in dating relationships for some people, it is equally likely that some people who use the violence tactics are playful and are perceived as playful, with no injury or fear resulting from that usage. Again, these variations in intention and outcome are lost.

4.3.3 Supplemental Questions

Straus (1990) recommended the use of supplemental questions to determine the causes and consequences of the violence assessed by the CTS. Makepeace (1986) had already done this, and the current study

followed his lead by including some of his supplemental questions in the research packet. In the current sample, clearer wording of the supplemental questionnaire may have provided more useful information regarding the number of occasions in which violence occurred in the subjects' dating relationships. This information could then have been related back to those individuals' violence scores to provide a clearer picture of the actual frequency (and possible intensity) of violent situations in the dating relationship. However, the lack of clarity in the supplemental questions was not the only problem, as few of the subjects experiencing violence completed them. Perhaps rather than relying on close-ended supplemental questions, an alternate method for examining men's and women's perceptions of violence in dating relationships should be considered.

One alternate method for exploring these perceptions and interpretations may be by means of a controlled variable study. Videos depicting various instances of "dating violence" could be shown to small groups of subjects. These subjects would then be asked to report on their perception of what happened, both as they saw it and how it might feel for them if they had been one of the actors. These reports from the subjects could then be analyzed for sex differences. Because subjects' prior experiences with physical and sexual aggression in intimate contexts would likely influence the subjects' perceptions, that prior experience could be noted as well. Such a "lab study" might lead to a more comprehensive understanding of dating violence, which might suggest interventions for those individuals who are victimized by it,

without censoring those individuals who are comfortable (rather than intimidated) with some level of physical "aggression" in their dating relationships.

A second alternate method for exploring the complex and dynamic nature of dating violence would be to interview men and women who have been (or currently are) in violent dating relationships. A screening procedure may effectively separate out those individuals who are "playing" from those who are minimizing potentially dangerous aggression. A structured interview would allow for easier coding of certain variables, while more open interviews would allow subjects to discuss their perceptions more freely, and may generate hypotheses which could later be tested by the use of self-report questionnaires. At any rate, interviews would offer subjects the opportunity to elaborate on their experience. Interviews might also further clarify, in participants' own terms, the high reported use of aggressive tactics by women (and receipt of them by men), which was one of the catalysts for the current research.

4.4 Concluding Comments

The high reported rate of violence in the student samples from both the University of Windsor and the University of Saskatchewan again emphasizes that dating violence is potentially a serious problem, even among populations which are relatively "normal". Results from the current study demonstrate that the use and receipt of physical aggression is reciprocal for both men and women. However, the

experience of sexual aggression for men was associated with the general aggressiveness of the relationship, while for women it was not.

The sex differences in the relationship between socialization and aggression in the current study may be reflective of gender differences in attitudes toward aggression which may reflect socialization processes. The results of the current study suggest that socialization is an important variable to be assessed when looking at dating violence. Socialization scores may be related to a sociocultural attitude about being physical in intimate relationships which differs by sex, and which is not obvious to dating partners. The contextual social structure needs to be considered when discussing dating violence, as this attitudinal difference in terms of how males and females see their relationships is important. The assessment of the importance of their relationship, for example, may influence whether or not young men and women will use violence, under what circumstances they will use violence, and their appraisal afterwards of whether or not the use of violence was justified. As well, what is "just playing" for some will be "just playing" for their partners as well, whereas "just playing" for others may be so intimidating for their partners that it effectively coerces those partners into doing things they would rather not do. A number count of the incidence of touching in a potentially aggressive manner may be too rigid for defining actual hostile aggression, for differentiating hostile aggression from playfulness, or for assessing potential negative psychological impacts from either.

The complexity of the issue of dating violence is continuing to emerge, and the use of self-report questionnaires as the premier method of exploring the issue seems limited. However, regardless of the limitations and difficulties of studying dating violence, it continues to be an important area worthy of future research. The potential of alternate research methods for furthering our understanding of the interpersonal dynamics within violent dating relationships, as well as the social supports for the persistence of dating violence, will continue to make the area worthy of future research endeavors.

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APPENDIX A

Request Letter Sent to Department Heads

September __, 1991

Dean (_____)
Faculty name
University of Saskatchewan

Dear _____,

I am a Master's student in the psychology department. As you are aware, one of the requirements for the Master of Arts degree in Psychology is a thesis involving empirical research. I have chosen to do mine on personality traits, violence and sexual aggression in dating relationships among college students.

I have compiled a questionnaire which includes a commonly used measure of conflict resolution strategies, a similar scale for measuring sexual aggression, and five reputable scales for measuring personality traits. There are also questions asking for demographic information regarding sex, age, and relationship status, and, for those students who assent to experiencing violence in their dating relationships, questions asking for interpretations of the violent behaviours. I would like for the sample of students filling out the questionnaire to be as representative of the student population at the University of Saskatchewan as possible. To achieve this goal, I would like access to an undergraduate course of students in your faculty (preferably second or third year students).

Enclosed is a photocopy of the application for recruitment of research subjects, as approved by the Ethics Committee of the psychology department. I'm hoping any questions you may have regarding my request will be answered by the information contained in that form. If you have any further questions, please contact me at 664-4069 (after August 25, 1991) or my thesis advisor, Dr. Lucinda Presse, at 975-4345.

I understand that it would be my responsibility to contact a professor within your faculty to arrange a convenient time to come to his/her class to administer the questionnaire. Perhaps you can recommend a professor who would be amenable to my request to spend about 10 minutes explaining my research to the class, distribute questionnaires, and return to the next meeting of tthe class to pick up the completed ones.

I hope to collect this data during the first week or two of classes in September, 1991, and I will follow up this letter by contacting you during the first week of classes. Thank you for your attention to my request.

Sincerely,

Patricia Pedersen
Psychology Department

APPENDIX B

Verbatim Instructions to Subjects

1. **My name** is Pat Pedersen, Master's student in Clinical Psychology.

2. My study is looking at personality variables and conflict resolution strategies used by university students in their dating relationships. **Strategies include** reasoning, avoidance, blame, postponement, and pushing, shoving. People differ in their **desired level of sexual activity** as well, and this may cause conflict, so the questionnaire asks about this as well. Because some of these questions may cause discomfort for students participating in the study, I would like you to write the **phone numbers from the board** onto the first page of your questionnaire.
(The numbers on the board were for the Sexual Assault & Information Centre, 244-2224; U. of S. Student Counselling Centre, 966-4920; Saskatoon Mental Health Clinic, 933-6500.)

3. Your participation is **entirely voluntary**. Your grade in this class is not contingent on your participation in this study. **Consent forms:** Top copy is for you to keep, it has Cindy's phone number on it, if you have any concerns, please phone her --

4. It is suggested that you complete the questionnaires when your partner is not present.

5. The results will be held in **confidence**, identified only by the research code number. Consent forms are separated from the answer sheets and cannot be rematched with them. Both are kept locked up.

6. **Debriefing** will be ready as of October 28 and will be available as a handout for those who participated. It is at the discretion of your professor as to whether or not I come back to discuss the study with you as a class.

7. The questionnaire takes about **45 minutes** to complete, however, it does **not require studying**.

8. I will return to the next meeting of this class to **pick up the completed** questionnaires.

9. **Feedback** will be available after the data is analyzed; I expect it to be ready for Valentine's Day, 1992.

APPENDIX C

Consent Form and Questionnaires

Used in the Current Study

Consent Form

Personality and Conflict Resolution

No matter how well we get along with others, conflict seems to be an inevitable part of our interpersonal relationships. Studies indicate that conflict occurs not only in marriage relationships and family-of-origin relationships, but within the context of dating relationships as well. The purpose of this study is to determine what relationship, if any, exists between normal personality characteristics and the means we use for resolving conflicts with our dating partners.

As a participant in this study, you will answer questions anonymously regarding your personality characteristics and the methods of conflict resolution used by you and your dating partner. Your personal responses will be identified only by a research code number, and will be held in confidence. Your participation in this study is entirely voluntary, and you may withdraw from this study at any time and/or refrain from answering any questions you choose to omit. There are no "right" or "wrong" answers to any of these questions; you are simply asked to be as honest about your experiences as you are able. It should take you about 45 minutes to complete the questionnaires.

This study has been approved by the Department of Psychology Ethics Committee, and any complaints regarding a procedure thatr appears to violate you welfare may be reported to the Head of the Psychology Department (ext. 2215), for referral to the Ethics Committee.

I have read the above description and agree to participate by completing the questionnaires. I understand that any information collected during this research will be kept completely confidential. I further understand that my participation in this research or my refusal to participate in it will in no way affect my marks or treatment in my class. My individual comments and test results will not be revealed to anyone nor will my name be used in any publications describing this research.

Upon request, I will receive an explanation of the general research results after they are analyzed. This explanation will be given directly or mailed to me.

In the event that I have any questions or complaints that are not handled to my satisfaction by Pat Pedersen, I understand that I am free to contact Dr. L.D. Presse, Supervisor of this project. (975-4345).

Signed _____ Date _____

Demographic Information

As you answer the following questions, please be as honest about your experiences as you are able. These personal responses will be held in confidence, identified only by the research code number on your answer sheet.

1. Age ____

2. Sex ____M ____F

3. Course Major _____

4. Are you currently (check one only):

    a. ____ married

    b. ____ not married, but cohabiting

    c. ____ going steady

    d. ____ casual dating

    e. ____ not currently involved in a relationship (Please complete the rest of this questionnaire on the basis of your most recent dating relationship.)

5. How long have you been in this relationship? _____ (months)

6. Were you involved in any other dating relationships prior to the one you'll be referring to in this questionnaire? ____Yes ____No

PLEASE USE THE ENCLOSED UNIVERSITY OF SASKATCHEWAN COMPUTERIZED ANSWER SHEETS TO ANSWER THE FOLLOWING QUESTIONS.

DO NOT put your name on the computer sheet; your answers will by identified by the research code number.

Supplemental Questions

If you answered yes to any of the items concerning the use of physical aggression with your partner, please answer the following questions:

1. On how many different occasions was physical aggression used in your relationship? (circle answer)
   a. You towards your partner: once 2-3 times more than 3 times
   b. Your partner against you: once 2-3 times more than 3 times
   c. Both equal participants: once 2-3 times more than 3 times

2. Who was the victim, generally? me my partner

3. Why do you think your partner used physical aggression against you? Put a check mark next to the one(s) which apply to you.
___ a. jealousy, anger
___ b. as an expressive or playful gesture rather than to cause harm
___ c. to cause harm
___ d. for self-defense or protection
___ e. to strengthen her/his refusal to participate in sexual activity
   f. frustration or stress, due to:
___ relationship with partner,
___ events unrelated to the relationship with my partner
___ g. Other _____

4. Why did you use physical aggression against your partner? Put a check mark next to the one(s) which apply to you.
___ a. jealousy, anger
___ b. as an expressive or playful gesture rather than to cause harm
___ c. to cause harm
___ d. for self-defense or protection
___ e. to strengthen my refusal to participate in sexual activity
   f. frustration or stress, due to:
___ relationship with partner,
___ events unrelated to the relationship with my partner
___ g. Other _____

Conflict Tactics Scales

Received Tactics

YOUR PARTNER

No matter how well a couple gets along, there are times when they disagree on major decisions, get annoyed about something the other person does, or just have spats or fights because they're in a bad mood or tired or for some other reason. They also use many different ways of trying to settle their differences. The following is a list of some things that your partner might have done when you had a dispute with your current partner. For each one, indicate how often your partner used it in the last year. Answer the questions on the answer sheet provided. Use the following answering key:

Never	Once	Twice	3-5 times	6-10 times	11-20 times	more than 20 times
0	1	2	3	4	5	6

9. Gave reasons for her/his side of the argument.
10. Agreed that I was partly right.
11. Told me that she/he was partly to blame.
12. Gave reasons why she/he thought I was wrong.
13. Asked for more explanation of my position.
14. Offered a solution that I thought would satisfy us both.
15. Discussed the issue calmly.
16. Argued strongly but did not shout.
17. Told me how upset she/he was.
18. Said I was being selfish.
19. Said I was hurting her/his feelings.
20. Brought up something bad I had done in the past.
21. Said things to make me feel guilty.
22. Brought up other things about me that bothered her/him.
23. Said I was ignoring her/his feelings.
24. Said I was being unfair.
25. Threatened to end the relationship.
26. Told me how much she/he had given in before.
27. Gave in, just to avoid conflict.
28. Gave in, just to make me happy.
29. Tried to change herself/himself so she/he wouldn't make me so angry.
30. Changed the subject to something more pleasant.
31. Just avoided the issue altogether.
32. Gave in, but brought it up again later.
33. Put off talking about it until we calmed down.
34. Refused to do things for me.

35. Said she/he had something else to do and couldn't talk about it right now.
36. Gave me the cold shoulder.
37. Said I was being too emotional.
38. Said she/he'd rather discuss it later.
39. Refused to speak to me.
40. Lied to support her/his side of the argument.
41. Offered something in return later if I would give in now.
42. Said she/he was in a bad mood or not feeling well.
43. Threw something at me.
44. Pushed, grabbed or shoved me.
45. Slapped me.
46. Held me down.
47. Kicked, bit, or hit me with her/his fist.
48. Hit or tried to hit me with something.
49. Choked me.
50. Beat me up.
51. Threatened me with a knife or gun.
52. Used a knife or gun on me.

Expressed Tactics

YOU

The next set of items is similar to the last set, but THIS TIME, answer them on the basis of how often YOU used each item during a conflict with your partner in the last year:

53. Gave reasons for my side of the argument.
54. Agreed that my partner was partly right.
55. Told my partner I was partly to blame.
56. Gave reasons why I thought my partner was wrong.
57. Asked for more explanation of my partner's position.
58. Offered a solution that I thought would satisfy us both.
59. Discussed the issue calmly.
60. Argued strongly but did not shout.
61. Told my partner how upset I was.
62. Said my partner was being selfish.
63. Said my partner was hurting my feelings.
64. Brought up something bad my partner had done in the past.
65. Said things to make my partner feel guilty.
66. Brought up other things about my partner that bothered me.
67. Said my partner was ignoring my feelings.
68. Said my partner was being unfair.
69. Threatened to end the relationship.
70. Told my partner how much I had given in before.
71. Gave in, just to avoid conflict.
72. Gave in, just to make my partner happy.
80. Tried to change myself so I wouldn't make my partner so angry.

81. Changed the subject to something more pleasant.
82. Just avoided the issue altogether.
83. Gave in, but brought it up again later.
84. Put off talking about it until we calmed down.
85. Refused to do things for my partner.
86. Said I had something else to do and couldn't talk about it right now.
87. Gave my partner the cold shoulder.
88. Said my partner was being too emotional.
89. Said I'd rather discuss it later.
90. Refused to speak to my partner.
91. Lied to support my side of the argument.
92. Offered something in return later if my partner would give in now.
93. Said I was in a bad mood or not feeling well.
94. Threw something at my partner.
95. Pushed, grabbed or shoved my partner.
96. Slapped my partner.
97. Held my partner down.
98. Kicked, bit, or hit my partner with my fist.
99. Hit or tried to hit my partner with something.
100. Choked my partner.
101. Beat my partner up.
102. Threatened my partner with a knife or gun.
103. Used a knife or gun on my partner.

Sexual Aggression Scale

On the next set of items, please indicate how often your partner used any of the following sexual activities against your will:

Never	Once	Twice	3-5 times	6-10 times	11-20 times	more than 20 times
0	1	2	3	4	5	6

104. Necking.
105. Breast/chest fondling.
106. Genital fondling.
107. Oral sex.
108. Attempted intercourse.
109. Intercourse without violence.
110. Intercourse with violence.

On the next set of items, please indicate how often you used any of the following sexual activities against your partner's will:

111. Necking.
112. Breast/chest fondling.
113. Genital fondling.
114. Oral sex.
115. Attempted intercourse.
116. Intercourse without violence.
117. Intercourse with violence.

Social Desirability Scale

Instructions: Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is True or False as it pertains to you personally. Blacken circle **A** for **True** and circle **B** for **False**

118. Before voting I thoroughly investigate the qualifications of all the candidates.
119. I never hesitate to go out of my way to help someone in trouble.
120. It is sometimes hard for me to go on with my work if I am not encouraged.
121. I have never intensely disliked anyone.
122. On occasion I have had doubts about my ability to succeed in life.
123. I sometimes feel resentful when I don't get my way.
124. I am always careful about my manner of dress.
125. My table manners at home are as good as when I eat out in a restaurant.
126. If I could get into a movie without paying and be sure I was not seen, I would do it.
127. On a few occasions, I have given up doing something because I thought too little of my ability.
128. I like to gossip at times.
129. There have been times when I felt like rebelling against people in authority even though I knew they were right.
130. No matter who I'm talking to, I'm always a good listener.
131. I can remember "playing sick" to get out of something.
132. There have been occasions when I took advantage of someone.
133. I'm always willing to admit it when I make a mistake.
134. I always try to practice what I preach.
135. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.
136. I sometimes try to get even rather than forgive and forget.
137. When I don't know something I don't at all mind admitting it.
138. I am always courteous, even to people who are disagreeable.
139. At times I have really insisted on having things my own way.
140. There have been occasions when I felt like smashing things.
141. I would never think of letting someone else be punished for my wrong-doings.
142. I never resent being asked to return a favour.
143. I have never been irked when people expressed ideas very different from my own.
144. I never make a long trip without checking the safety of my car.
145. There have been times when I was quite jealous of the good fortune of others.
146. I have almost never felt the urge to tell someone off.
147. I am sometimes irritated by people who ask favours of me.
148. I have never felt that I was punished without cause.
149. I sometimes think when people have a misfortune they only got what they deserved.
150. I have never deliberately said something that hurt someone's feelings.

The I-7 Questionnaire

Instructions: Please answer the following questions either YES of NO. There are no "right" or "wrong" answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the question.
Blacken the A circle on the answer sheet for YES and the B circle on the answer sheet for NO.

PLEASE REMEBER TO ANSWER EACH QUESTION

151. Would you enjoy water skiing?
152. Usually do you prefer to stick to brands you know are reliable, to trying new ones on the chance of finding something better?
153. Would you feel sorry for a lonely stranger?
154. Do you quite enjoy taking risks?
155. Do you often get emotionally involved with your friends' problems?
156. Would you enjoy parachute jumping?
157. Do you often buy things on impulse?
158. Do unhappy people who are sorry for themselves irritate you?
159. Do you generally do and say things without stopping to think?
160. Are you inclined to get nervous when others around you seem to be nervous?
161. Do you often get into a jam because you do things without thinking?
162. Do you think hitch-hiking is too dangerous a way to travel?
163. Do you find it sill for people to cry out of happiness?
164. Do you like diving off the highboard?
165. Do people you are with have a strong influence on your moods?
166. Are you an impulsive person?
167. Do you welcome new and exciting experiences and sensation, even if they are a little frightening and unconventional?
168. Does it affect you very much when one of your friends seems upset?
169. Do you usually think carefully before doing anything?
170. Would you like to learn to fly an airplane?
171. Do you ever get deeply involved with the feelings of a character in a film, play or novel?
172. Do you often do things on the spur of the moment?
173. Do you get very upset when you see someone cry?
174. Do you sometimes find someone else's laughter catching?
175. Do you mostly speak before thinking things out?
176. Do you often get involved in things you later wish you could get out of?
177. Do you get so "carried away" by new and exciting ideas, that you never think of possible snags?
178. Do you find it hard to understand people who risk their necks climbing mountains?
179. Can you make decisions without worrying about other people's feelings?
180. Do you sometimes like doing things that are a bit frightening?

181. Do you need to use a lot of self-control to keep out of trouble?
182. Do you become more irritated than sympathetic when you see someone cry?
183. Would you agree that almost everything enjoyable is illegal or immoral?
184. Generally do you prefer to enter cold sea (or lake) water gradually to diving or jumping straight in?
185. Are you often surprised at people's reaction to what you do or say?
186. Would you enjoy the sensation of skiing very fast down a high mountain slope?
187. Do you like watching people open presents?
188. Do you think an evening out is more successful if it is unplanned or arranged at the last moment?
189. Would you like to go scuba diving?
190. Would you find it very hard to break bad news to someone?
191. Would you enjoy fast driving?
192. Do you usually work quickly, without bothering to check?
193. Do you often change your interests?
194. Before making up your mind, do you consider all the advantages and disadvantages?
195. Can you get very interested in your friends' problems?
196. Would you like to go pot-holing (exploring underground caves)?
197. Would you be put off a job involving quite a bit of danger?
198. Do you prefer to "sleep on it" before making decisions?
199. When people shout at you, do you shout back?
200. Do you feel sorry for shy people?
201. Are you happy when you are with a cheerful group and sad when the others are glum?
202. Do you usually make up your mind quickly?
203. Can you imagine what it must be like to be very lonely?
204. Does it worry you when others are worrying and panicky?

The IMD Inventory

Instructions: For each statement below blacken the appropriate circle to indicate how well it describes you. Do not spend much time on any one statement. There are no right or wrong answers and no trick questions. Each statement has a different meaning. Mark your answers on the answer sheet.

Mostly False	Somewhat False	Somewhat True	Mostly True
(0)	(1)	(2)	(3)

205. I am always keen on trying out things that are new. (M)
206. It is easy for me to get close to people. (D)-R
207. I like leading a quiet and organized life. (M)-R
208. I have a tendency to act on the spur of the moment without really thinking ahead. (I)
209. When I have to make a decision, I "sleep on it" before I decide. (I)-R
210. I prefer people who come up with exciting and unexpected activities. (M)
211. I want to confide in someone when I am worried and unhappy. (D)-R
212. I usually get so excited over new ideas and suggestions that I forget to check if there are any disadvantages. (I)
213. I have an unusually great need for change. (M)
214. I avoid people who are interested in my personal life. (D)
215. I often throw myself too hastily into things. (I)
216. I am a very particular person. (I)-R
217. People often come to me with their troubles. (D)-R
218. I feel uncomfortable when other people take me into their "confidence". (D)
219. I am deeply moved by other people's misfortunes. (D)-R
220. I try to get to places where things really happen. (M)
221. I almost always have a desire for more action. (M)
222. I feel best when I keep people at a certain distance. (D)
223. I think it is quite right to describe me as a person who takes things as they come. (I)
224. I usually "talk before I think". (I)
225. In a way, I like to do routine jobs. (M)-R
226. I prefer to avoid involving myself in other people's personal problems. (D)
227. I like doing things just for the thrills of it. (M)
228. When I'm about to make a decision I usually make it quickly. (I)
229. I take life easy. (I)
230. People generally think that I hide my feelings so that they have difficulty in understanding me. (D)
231. I consider myself reserved and a little cold rather than kind and warm. (D)
232. I consider myself an impulsive person. (I)
233. To be on the move, travelling, change and excitement - that's the kind of life I like. (M)
234. When listening to the radio, I want it really loud, so that I can feel "turned on". (M)

CPI Socialization (So) Scale

Instructions: This is not a test, and there are no right or wrong answers as such. We are interested in your present feelings. Please blacken circle**A** for **True** and the **B** circle for **False**.

235. I often feel that I made a wrong choice in my occupation.
236. When I was going to school I played hooky quite often.
237. I think Lincoln was greater than Washington.
238. I would do almost anything on a dare.
239. With things going as they are, it is pretty hard to keep up hope of amounting to something.
240. I think I am stricter about right and wrong than most people.
241. I am somewhat afraid of the dark.
242. I hardly ever get excited or thrilled.
243. My parents have often disapproved of my friends.
244. My home life was always happy.
245. I often act on the spur of the moment without stopping to think.
246. My parents have generally let me make my own decisions.
247. I would rather go without something than ask for a favour.
248. I have had more than my share of things to worry about.
249. When I meet a stranger I often think that he is better than I am.
250. Before I do something I try to consider how my friends will react to it.
251. I have never been in trouble with the law.
252. In school I was sometimes sent to the principal for cutting up.
253. I keep out of trouble at all costs.
254. Most of the time I feel happy.
255. I often feel as though I have done something wrong or wicked.
256. It is hard for me to act natural when I am with new people.
257. I have often gone against my parents' wishes.
258. I often think about how I look and what impression I am making upon others.
259. I have never done any heavy drinking.
260. I find it easy to "drop" or "break up with" a friend.
261. I get nervous when I have to ask someone for a job.
262. Sometimes I used to feel that I would like to leave home.
263. I never worry about my looks.
264. I have been in trouble one or more times because of my sex behaviour.
265. I go out of my way to meet trouble rather than to escape it.
266. My home life was always very pleasant.
267. I seem to do things that I regret more often than other people do.
268. My table manners are not quite as good at home as when I am out in company.
269. It is pretty easy for people to win arguments with me.
270. I know who is responsible for most of my troubles.
271. I get pretty discouraged with the law when a smart lawyer gets a criminal free.
272. I have used alcohol excessively.

273. Even when I have gotten into trouble, I was usually trying to do the right thing.
274. It is very important to me to have enough friends and a good social life.
275. I sometimes wanted to run away from home.
276. Life usually hands me a pretty raw deal.
277. People often talk about me behind my back.
278. I would never play cards (poker) with a stranger.
279. I don't think I am quite as happy as others seem to be.
280. I used to steal sometimes when I was a youngster.
281. My home as a child was less peaceful and quiet than most other peoples.
282. Even the idea of giving a talk in public makes me afraid.
283. As a youngster in school I used to give the teachers lots of trouble.
284. If the pay was right I would like to travel with a circus or carnival.
285. I never cared much for school.
286. The members of my family were always very close to each other.
287. My parents never really understood me.
288. A person is better off if he doesn't trust anyone.

APPENDIX D

Debriefing and Feedback Statements for the Saskatchewan and Windsor Subjects

Debriefing for the Saskatchewan Sample

In my initial statements to this class, I said that I was looking at personality variables and the means used by university students to resolve conflict in their dating relationships. The focus of this study is on dating violence. Dating violence has become a topic of interest to many, although research since 1981 demonstrates that the phenomena of violence in college students' dating relationships is not, in itself, new.

The questionnaire which I used to assess the conflict resolution strategies is a revised version (Josephson & Check, 1990) of the Conflict Tactics Scales (CTS; Straus, 1979). The CTS is the instrument most frequently used to determine the incidence and prevalence of violence in both marital and dating relationships. The revised version permits assessment of conflict resolution tactics across five domains: Reasoning (9 items; e.g., "discussed the issue"), Escalation/Blame (9 items; e.g., "said my partner was being selfish"), Avoidance (7 items; e.g., "gave in, just to avoid conflict"), Indirect Approach (9 items; e.g., "refused to do things for my partner"), and Violence (10 items; e.g., "pushed, grabbed, or shoved"). The items in each scale are listed in order of escalating coercion or force, and the scale is administered twice -- once to determine the use of each tactic by the respondent, and again to determine perceived use of each tactic by the respondent's partner.

Research using the CTS indicates that more women than men report using physically aggressive tactics against their dating partners. This is puzzling, given that the rate of victimization of women by their male partners is overwhelmingly greater than the reverse. However, the CTS does not assess tactics which may be used by men against their partners when they are making unwanted sexual advances, yet most of the tactics used by a woman to protect herself in such a situation (e.g., slapping, shoving) are listed on the scale. Unwanted sexual advances were measured by a seven-item scale developed by Stets and Pirog-Good (1989), which was administered in a manner similar to the revised CTS. For female respondents, I expect to find a correlation between their reported use of violence tactics and their reported receipt of unwanted sexual advances.

The personality scales used in the study were chosen because they have been successful in discriminating between aggressive and non-aggressive groups. These personality scales are the Socialization scale from the California Psychological Inventory (Gough, 1975; people with higher scores are considered "more socialized" while those with lower scores are considered "less socialized"), the I-7 Impulsiveness Questionnaire (Eysenck, Pearson, Easting, & Allsopp, 1985; this scale assesses venturesomeness and empathy as well as impulsiveness), the Impulsivity, Monotony Avoidance, Detachment scale (Schalling, 1978; these scales are similar to the I-7, but were developed with a European population in mind), and the Need for Approval Scale (Crowne & Marlowe, 1964; this scale is generally used to factor out effects due to socially desirable responding).

I expect that male respondents who report using violence and sexual aggression against their dating partners will score low on the Socialization scale and the empathy measure of the I-7, while scoring high on the impulsivity, venturesomeness, monotony avoidance and detachment scales. Aggressive subjects tend to earn this pattern of scores, which distinguishes them from their non-aggressive peers.

If you are experiencing difficulties in your relationship due to, Ror resulting in, violence or unwanted sexual aggression, the following agencies have staff-persons who are qualified to help: U. of S. Student Counselling Centre, 966-4920; Sexual Assault & Information Centre, 244-2224; Saskatoon Mental Health Clinic, Alternatives Program, 933-6500.

References

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Feedback for the Saskatchewan Sample

In my initial statements to your class, I said that I was looking at personality variables and the means used by university students to resolve conflict in their dating relationships.

The questionnaire which I used to assess the conflict resolution strategies is a revised version (Josephson & Check, 1990) of the Conflict Tactics Scales (CTS; Straus, 1979). I stated that research using the CTS indicates that more women than men report using physically aggressive tactics against their dating partners, which is puzzling, given that the rate of victimization of women by their male partners is overwhelmingly greater than the reverse. However, the CTS does not assess tactics which may be used by men against their partners when they are making unwanted sexual advances, and most of the tactics used by a woman to protect herself in such a situation (e.g., slapping, shoving) are listed on the scale. Therefore, for female respondents, I expected to find a correlation between their reported use of violence tactics and their reported receipt of unwanted sexual advances. The data did not support my hypothesis for women. However, for men there was a correlation between their use of sexually aggressive tactics and their partners' use of physically aggressive tactics. This correlation does not mean that their receipt of physical violence was due to their sexual aggression; in fact, the opposite may also be true. As men are socially constrained to not use violence against their partners, they may resort to sexual aggression after their partners have been "violent' towards them, justifying their sexual aggression by statements such as "she really likes it", or "she was asking for it".

The personality scales used in the study were chosen because they have been successful in discriminating between aggressive and non-aggressive groups. These personality scales are the Socialization (So) scale from the California Psychological Inventory (Gough, 1975; people with higher scores are considered "more socialized" while those with lower scores are considered "less socialized"), the I-7 Impulsiveness Questionnaire (Eysenck, Pearson, Easting, & Allsopp, 1985; this scale assesses venturesomeness and empathy as well as impulsiveness), the Impulsivity, Monotony Avoidance, Detachment scale (Schalling, 1978; these scales are similar to the I-7, but were developed with a European population in mind), and the Need for Approval Scale (Crowne & Marlowe, 1964; this scale is generally used to factor out effects due to socially desirable responding).

I expected that male respondents who report using violence tactics and sexual aggression against their dating partners would score low on the So scale and the empathy measure of the I-7, while scoring high on the impulsivity, venturesomeness, monotony avoidance and detachment scales. Again, my hypothesis was not supported. Both men and women who reported using physical and sexual aggression against their dating partners scored low on the So scale; their scores on the other personality measures were not related to their use of physical and sexual aggression.

If you are experiencing difficulties in your relationship due to, or resulting in, violence or unwanted sexual aggression, the following agencies have staff-persons who are qualified to help: U. of S. Student Counselling Centre, 966-4920; Sexual Assault & Information Centre, 244-2224; Saskatoon Mental Health Clinic, Alternatives Program, 933-6500.

References

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Feedback for Windsor Participants

First, please accept my apologies for not having sent this statement to you by Christmas. If I could have done so, I would have.

In my initial statements to your class, I said that I was looking at personality variables and the means used by university students to resolve conflict in their dating relationships. The focus of this study is on dating violence. Dating violence has become a topic of interest to many, although research since 1981 demonstrates that the phenomena of violence in college students' dating relationships is not, in itself, new.

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Research using the CTS indicates that more women than men report using physically aggressive tactics against their dating partners. This is puzzling, given that the rate of victimization of women by their male partners is overwhelmingly greater than the reverse. However, the CTS does not assess tactics which may be used by men against their partners when they are making unwanted sexual advances, yet most of the tactics used by a woman to protect herself in such a situation (e.g., slapping, shoving) are listed on the scale. Unwanted sexual advances were measured by a seven-item scale developed by Stets and Pirog-Good (1989), which was administered in a manner similar to the revised CTS. For female respondents, I expected to find a correlation between their reported use of violence tactics and their reported receipt of unwanted sexual advances. The data did not support my hypothesis for women. However, for men there was a correlation between their use of sexually aggressive tactics and their partners' use of physically aggressive tactics. This correlation does not mean that mens' receipt of physical violence was due to their sexual aggression; in fact, the opposite may also be true. As men are socially constrained to <u>not</u> use violence against their partners, they may resort to sexual aggression after their partners have been "violent" towards them, justifying their sexual aggression by statements such as "she was asking for it", or "she really likes it."

The personality scales used in the study were chosen because they have been successful in discriminating between aggressive and non-

aggressive groups. These personality scales are the Socialization (So) scale from the California Psychological Inventory (Gough, 1975; people with higher scores are considered "more socialized" while those with lower scores are considered "less socialized"), the I-7 Impulsiveness Questionnaire (Eysenck, Pearson, Easting, & Allsopp, 1985; this scale assesses venturesomeness and empathy as well as impulsiveness), the Impulsivity, Monotony Avoidance, Detachment scale (Schalling, 1978; these scales are similar to the I-7, but were developed with a European population in mind), and the Need for Approval Scale (Crowne & Marlowe, 1964; this scale is generally used to factor out effects due to socially desirable responding).

I expected that male respondents who report using violence tactics and sexual aggression against their dating partners would score low on the So scale and the empathy measure of the I-7, while scoring high on the impulsivity, venturesomeness, monotony avoidance and detachment scales. Aggressive subjects tend to earn this pattern of scores, which distinguishes them from their non-aggressive peers. Again, my hypothesis was not supported. Both men and women who reported using physical and sexual aggression against their dating partners scored low on the So scale; however, their scores on the other personality measures were not related to their use of physical and sexual aggression.

If you, or someone you know, is/are experiencing difficulties in your relationship due to, or resulting in, violence or unwanted sexual aggression, the following agencies have staff-persons who are qualified to help: U. of W. Student Counselling Centre, 973-7012; Sexual Assault Crisis Centre, 253-9667.

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APPENDIX E

Pearson Product-Moment Correlations and Spearman "G" Correlations Among the Personality and Aggression Variables for the Windsor Sample

Table 1

Pearson Product-Moment Correlations Among Personality Variables for the Windsor Sample

	Socialization	Eysenck's Impulsivity	Empathy	Venture-someness	Schalling's Impulsivity	Detachment	Monotony Avoidance
Eysenck's Impulsivity	-.504 ***						
Eysenck's Empathy	.183 **	.076					
Venture-someness	-.280 ***	.235 ***	-.234 ***				
Schalling's Impulsivity	-.370 ***	.788 ***	.014	.341 ***			
Detachment	-.228 ***	.071	-.306 ***	-.033	-.077		
Monotony Avoidance	-.275 ***	.437 ***	-.032	.588 ***	.476 ***	-.096	
Need for Approval	.256 ***	-.307 ***	.002	-.030	-.129 *	-.140 *	-.078

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 2

Pearson Product-Moment Correlations Between Physical and Sexual Aggression for the Windsor Sample

	Physical Aggression Expressed	Physical Aggression Received	Sexual Aggression Expressed	Sexual Aggression Received
Physical Aggression Received	.679 ***			
Sexual Aggression Expressed	.343 ***	.395 ***		
Sexual Aggression Received	.311 ***	.368 ***	.600 ***	

*** $p < .001$

Table 3

Pearson Correlations Between Personality and Violence Variables for the Total Sample

	Expressed Phys. Agg.	Received Phys. Ag.	Express Sex Ag.	Receive Sex Ag.
Socialization	-.282 ***	-.293 ***	-.161 **	-.152 **
Eysenck's Impulsivity	.161 **	.141 *	-.024	.030
Empathy	-.160 **	-.210 ***	-.149 **	.001
Venture-someness	.121 *	.057	.034	.021
Schalling's Impulsivity	.119 *	.118 *	-.047	.044
Detachment	.046	.145 **	.115 *	-.005
Monotony Avoidance	.064	.042	-.008	.014
Need for Approval	-.081	-.098	-.001	-.052

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 4

Spearman Correlations for Personality Variables for the Windsor Sample

	Socialization	Eysenck's Impulsivity	Empathy	Venture-someness	Schalling's Impulsivity	Detach-ment	Monotony Avoidance
Eysenck's Impulsivity	-.478 ***						
Empathy	.200 ***	.064					
Venture-someness	-.253 ***	.232 ***	-.221 **				
Schalling's Impulsivity	-.346 ***	.783 ***	.017	.345 ***			
Detachment	-.228 ***	.078	-.282 ***	-.045	-.064		
Monotony Avoidance	-.260 ***	.415 ***	-.042	.562 ***	.430 ***	-.112 *	
Need for Approval	.221 ***	-.275 ***	-.014	-.007	-.097	-.138 *	-.062

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5

Spearman G Correlations Between Physical and Sexual Aggression for the Total Sample

	Physical Aggression Expressed	Physical Aggression Received	Sexual Aggression Expressed	Sexual Aggression Received
Physical Aggression Received	.607 ***			
Sexual Aggression Expressed	.310 ***	.331 ***		
Sexual Aggression Received	.284 ***	.327 ***	.604 ***	

*** $p < .001$

Table 6

Spearman Correlations Between Personality and Violence Variables for the Total Sample

	Expressed Phys. Agg.	Received Phys. Ag.	Express Sex Ag.	Receive Sex Ag.
Socialization	-.271 ***	-.310 ***	-.120 *	-.106 *
Eysenck's Impulsivity	.129 *	.187 **	.014	.028
Empathy	-.133 *	-.180 **	-.141 *	-.006
Venture-someness	.048	.059	.097	.020
Schalling's Impulsivity	.077	.096	-.001	.015
Detachment	.105 *	.209 ***	.101 *	.052
Monotony Avoidance	.056	.037	-.012	-.045
Need for Approval	-.078	-.109 *	-.000	-.040

* $p < .05$; ** $p < .01$; *** $p < .001$

APPENDIX F

CTS-R Violence Scale and Sexual Aggression Tactic Analysis by Sex

Table 1

Percentage of Windsor Male Subjects Reporting use of Each Tactic in the Expressed Physical Aggression Scale by Category (n = 86)

Score =	0	1	2	3	4	5	6	
Tactic / Category =	Never	Once	Twice	3 - 5 Times	6 - 10 Times	11 - 20 Times	More than 20 times	Item Mean Score (SD)
Threw something (at Partner)	86.0	5.8	4.7	3.5	--	--	--	.26 (.71)
Pushed, grabbed, or shoved	79.1	9.3	9.3	1.2	1.2	--	--	.36 (.80)
Slapped	84.9	9.3	--	4.7	--	1.2	--	.29 (.85)
Held down	75.6	9.3	4.7	5.8	1.2	--	3.5	.62 (1.37)
Kicked, bit, hit with fist	88.4	3.5	1.2	4.7	1.2	--	1.2	.31 (1.01)
Hit (or tried) with something	90.7	3.5	2.3	2.3	--	--	1.2	.22 (.85)
Choked	91.9	5.8	1.2	1.2	--	--	--	.12 (.45)
Beat up	90.7	4.7	4.7	--	--	--	--	.14 (.46)
Threatened with knife or gun	93.0	3.5	1.2	1.2	--	1.2	--	.15 (.68)
Used a knife or gun	94.2	3.5	--	--	2.3	--	--	.13 (.63)

Note. The potential range on each of the above tactics is 0 - 6.

Table 2

Means, Standard Deviations, and Percentage of Respondents Who Reported Expressing and Receiving Specific Physical Aggression Tactics

Aggression Tactic		Expressed		Received	
		Male (n = 86)	Female (n = 188)	Male	Female
Threw something	M	.256	.362	.802	.160 ***
	SD	.706	.963	1.344	.771
	%	12.8	17.6	33.7	6.4
Pushed, grabbed, or shoved	M	.360	.436	1.023	.473 **
	SD	.796	1.085	1.471	1.130
	%	20.9	20.2	43.0	22.9
Slapped	M	.291	.245	.686	.229 ***
	SD	.852	.783	1.258	.831
	%	15.1	13.8	31.4	9.0
Held down	M	.616	.101 ***	.430	.340
	SD	1.373	.480	1.069	1.003
	%	24.4	5.3	18.6	14.4
Kicked, bit, or hit with fist	M	.314	.287	.756	.176 ***
	SD	1.009	.480	1.405	.721
	%	11.6	9.0	31.4	7.4
Hit (or tried) with something	M	.221	.218	.721	.149 ***
	SD	.846	.815	1.428	.723
	%	9.3	10.1	29.1	5.3
Choked	M	.116	.000	.407	.096 **
	SD	.445	.628	1.192	.519
	%	8.1	2.7	14.0	4.8
Beat up	M	.140	.064	.267	.069 *
	SD	.464	.395	.900	.388
	%	9.3	3.2	10.5	4.3
Threatened with a knife/gun	M	.151	.064	.279	.133
	SD	.678	.367	.821	.628
	%	7.0	3.7	14.0	5.9
Used a knife/gun	M	.128	.043	.291	.085 *
	SD	.629	.324	.866	.579
	%	5.8	2.1	11.6	2.1

* $p < .05$; ** $p < .01$; *** $p < .001$; Overall $F(10, 263)=3.22$, $p < .001$. Significance levels indicated are for sex differences within the expressed or received physical aggression column.

Table 3

Means, Standard Deviations, and Percentage of Respondents Who Reported Expressing and Receiving Specific Sexual Aggression Tactics

Aggression Tactic		Expressed		Received	
		Male (n = 86)	Female (n = 188)	Male	Female
Necking	M	.837	.293 **	.756	.606
	SD	1.556	.984	1.623	1.322
	%	30.2	11.7	26.7	24.5
Breast/Chest fondling	M	.953	.255 ***	.663	.729
	SD	1.666	.907	1.546	1.539
	%	34.9	10.1	22.1	24.5
Genital fondling	M	.860	.186 ***	.826	.590
	SD	1.603	.680	1.682	1.425
	%	32.6	10.1	26.7	18.6
Oral sex	M	.547	.096 ***	.547	.505
	SD	1.252	.428	1.369	1.326
	%	22.1	5.3	19.8	18.1
Attempted intercourse	M	.581	.181 **	.547	.601
	SD	1.232	.759	1.325	1.420
	%	24.4	8.0	22.1	20.7
Intercourse without violence	M	.453	.160 *	.419	.388
	SD	1.403	.764	1.350	1.260
	%	12.8	5.9	12.8	12.2
Intercourse with violence	M	.140	.048	.128	.101
	SD	.654	.332	.549	.543
	%	4.7	2.7	7.0	5.3

* $p < .05$; ** $p < .01$; *** $p < .001$

Note. Overall F (7,266) = 4.02, p = .000; Significance levels indicated are for sex differences within the expressed or received sexual aggression column, and not for differences between the expressed and received sexual aggression.